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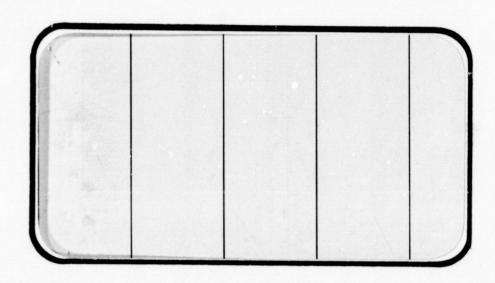
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# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR. 14/545



(NASA-CR-141545) RESULTS OF A JET PLUME EFFECTS TEST ON THE ROCKWELL INTERNATIONAL INTEGRATED SPACE SHUTTLE VEHICLE USING A VEHICLE 5 CONFIGURATION 0.02-SCALE MODEL (88-OTS) IN THE 11 BY 11 FOOT LEG OF THE

N75-27049

Unclas G3/18 28870

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER HOUSTON, TEXAS

DATA MANagement services



DMS-DR-2170 NASA-CR-141,545

RESULTS OF A JET PLUME EFFECTS TEST

ON THE ROCKWELL INTERNATIONAL INTEGRATED

SPACE SHUTTLE VEHICLE USING A VEHICLE 5

CONFIGURATION 0.02-SCALE MODEL (88-OTS)

IN THE 11 x 11 FOOT LEG OF THE NASA/AMES

RESEARCH CENTER UNITARY PLAN WIND TUNNEL (IA19)

VOLUME 3 OF 3

Ву

M. E. Nichols Wind Tunnel Operations Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

Ву

Data Management Services. Chrysler Corporation Space Division New Orleans, La. 70189

for

**Engineering Analysis Division** 

Johnson Space Center National Aeronautics and Space Administration Houston, Texas

#### WIND TUNNEL TEST SPECIFICS:

Test Number

ARC 11-014

NASA Series Number: Model Number:

IA19 88-0TS

Test Dates:

9-16 through 9-24-74

Occupancy Hours:

120

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Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

RESULTS OF A JET PLUME EFFECTS TEST

ON THE ROCKWELL INTERNATIONAL INTEGRATED

SPACE SHUTTLE VEHICLE USING A VEHICLE 5

CONFIGURATION 0.02-SCALE MODEL (88-OTS)

IN THE 11 x 11 FOOT LEG OF THE NASA/AMES

RESEARCH CENTER UNITARY PLAN WIND TUNNEL (1A19)

Ву

M. E. Nichols, Rockwell International Space Division

#### **ABSTRACT**

Presented in this report are results of jet plume effects Test IA19 using a Vehicle 5 configuration integrated Space Shuttle Vehicle 0.02-scale model in the NASA/Ames Research Center 11 x 11-foot leg of the Unitary Plan Wind Tunnel. Testing was conducted between 16 September and 24 September 1974.

The primary objective of this test was the determination of jet plume power effects on the integrated vehicle static pressure distribution.

Secondary objectives were to determine: 1) elevon, Main Propulsion System nozzle and Solid Rocket Booster nozzle effectiveness and 2) elevon hinge moments. MPS and SRB nozzle conditions were set according to calibration data obtained at Rockwell International/Rocketdyne Division's Rocket Nozzle Test Facility.

Mach numbers tested were at 0.90, 1.10, 1.25 and 1.40. Angle of attack was varied from -8° to +8° while the angle of sideslip was varied from -4° to +4°. Reynolds number was changed with Mach number, as shown in Table 1.

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	DCHEI, DCHEO versus ALPHA	I) DELCP	versus X/C	
	DCHEI, DCHEO versus BETA	J) CP ver	sus PHI	
	CHEI, CHEO, CABO, CABS, CABT versus MACH	K) DELCP	versus PHI	
	CP versus X/L			

### INTRODUCTION

A vehicle 5 configuration 0.02-scale Integrated Space Shuttle Model was tested in the ARC Unitary Plan Wind Tunnel. The testing was conducted in the 11 x 11-foot section between 16 September and 24 September 1974. Cold flow through the Main Propulsion System (MPS) nozzle and the Solid Rocket Booster (SRB) nozzle was used to simulate jet plume effects. This test was designated IA19.

This report for the IA19 test contains a tabular listing of all source force and pressure data. Selected force plots that illustrate power setting effects on the integrated vehicle static axial pressure distribution and elevon hinge moment are included. These plots also show elevon control deflection effectiveness and the effect of gimbal control deflection. Pressure plots that illustrate power setting effects on the local pressure distribution for the Orbiter, External Tank (ET) and SRB are also included. This information is arranged in the following manner:

1 pressure dist	essure distribution for the Orbiter, External Tank (ET) and SRB		
also included.	This information is arranged in the following	lowing manner:	
me No.	Contents	Page	
1.	IA19 force data plots		
	IA19 pressure data plots		
	IA19 force data tabulation		
2.	IA19 pressure data tabulation of		
	Orbiter body Top of orbiter wing Bottom of orbiter wing SRB body	1-123 124-428 429-733 734-799	

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<b>3.</b>	IA19 pressure data tabulation of	
	Orbiter vertical tail	800-916
	External tank body	<b>9</b> 17-1091
	Orbiter body flap	1092-1211
	Orbiter base	1212-1337
	External tank base	1338-1512
	SRB base	1513-1578

The pressure data were recorded for each component. The fourth character in each dataset identifier (i.e., REUBXX, B for fuselage) represents the individual component. The following list indicates the symbol for each component.

SYMBOL	COMPONENT
<b>B</b>	Orbiter fuselage
	Upper body flap surface
<b>.</b>	Lower body flap surface
<b>6</b>	Orbiter base
	External tank base
	SRB base
R	Upper wing surface
S	Solid Rocket Booster (SRB)
	External tank
	Vertical tail surface
	Lower wing surface

### NOMENCLATURE General

	SADSAC	
SYMBOL	SYMBOL	DEFINITION
8 ····	The Market Control	speed of sound; m/sec, ft/sec
C <sub>p</sub>	CP	pressure coefficient; $(p_l - p_{\infty})/q$
<b>M</b> .	MACH	Mach number; V/a
p		pressure; N/m <sup>2</sup> , psf
<b>q</b>	Q(NSM) Q(PSF)	dynamic pressure; 1/2 pV2, N/m2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
<b>v</b>		velocity; m/sec, ft/sec
ø	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
φ	PHI	angle of roll, degrees
ρ		mass density; kg/m3, slugs/ft3
	<u>Re</u>	ference & C.G. Definitions
A <sub>b</sub> ·		base area; m <sup>2</sup> , ft <sup>2</sup>
<b>b</b>	BREF	wing span or reference span; m, ft
c.g.		center of gravity
<b>ℓ</b> <sub>REF</sub> c	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m2, ft2
	MRP	moment reference point
	<b>XM</b> RP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis
SUBSCRIP	<b>T</b> S	사람이 경우 바람이 있다는 사람들이 있습니다. 10 - 10 - 12 - 14 - 15 - 15 - 15 - 15 - 15 - 15 - 15
b		base
		local static conditions
\$ <b>t</b>		total conditions
<b>.</b>		free stream

# NOMENCLATURE (Continued)

## Body-Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION 2000
$\mathbf{c}^{\mathbf{N}}$	CN	normal-force coefficient; normal force qS
$\mathtt{c}_\mathtt{A}$	CA	axial-force coefficient; axial force qS
c <sub>Y</sub>	CY	side-force coefficient; side force qS
$c_{A_b}$	CAB	base-force coefficient; $\frac{\text{base force}}{\text{qS}}$ $-A_b(p_b - p_{\infty})/\text{qS}$
$\mathtt{c}_{\mathtt{A}_{\mathbf{f}}}$	CAF	forebody axial force coefficient, CA - CAb
$c_{m}$	CIM	pitching-moment coefficient; pitching moment qS/REF
<b>c</b> n	CYN	yawing-moment coefficient; yawing moment qSb
<b>cℓ</b>	CBL	rolling-moment coefficient; rolling moment qSb
		Stability-Axis System
$\mathtt{c}_{\mathtt{L}}$	CL	lift coefficient; lift qS
$\mathbf{c}_{\mathbf{D}}$	CD	drag coefficient; drag qS
$c_{D_{f b}}$	CDB	base-drag coefficient; base drag
$\mathbf{c_{D_f}}$	CDF	forebody drag coefficient; CD - CDb
C <sub>Y</sub>	CY	side-force coefficient; side force qS
C <sub>m</sub>	CIM	pitching-moment coefficient; pitching moment
C <sub>n</sub>	CLN	yawing-moment coefficient; yawing moment qSb
c <b>√</b>	CSL	rolling-moment coefficient; rolling moment qSb
<b>L/</b> D	L/D	lift-to-drag ratio; C <sub>I</sub> /C <sub>D</sub>
L/Df	L/DF	lift to forebody drag ratio; CI/CDf

### NOMENCLATURE (Continued) Additions to Standard List

	SADSAC	
Symbol	Symbol	<u>Definition</u>
Ai		model base area, denoted by associated tap number subscript, $\operatorname{ft}^2$
c <sub>ABO</sub>	САВО	Orbiter base axial force coefficient
c <sub>ABS</sub>	CABS	SRB base axial force coefficient
c <sub>ABT</sub>	CABT	ET base axial force coefficient
ē <sub>E</sub>		M. A. C. of total elevon panel (inbd plus outbd), in.
CHEI	CHEI	hinge moment coefficient for inboard elevon
CH <sub>EO</sub>	CHEO	hinge moment coefficient for outboard elevon
CHET	CHET	total elevon hinge moment coefficient
Cp <sub>i</sub>		model pressure coefficient, denoted by a subscript i
CPRj	PR	ratio of prototype nozzle chamber pressure to freestream static pressure, denoted by a subscript j
EPRj		ratio of nozzle exit pressure to freestream static pressure, denoted by a subscript j
HMEI		hinge moment of inboard elevon, in-lbs
HMEO		hinge moment of outboard elevon, in-lbs
Pcj		nozzle chamber pressure, denoted by a nozzle number subscript, psia
Pej		nozzle exit pressure, denoted by a nozzle number subscript, psia
S <sub>E</sub>		total elevon planform area for one wing panel, ft <sup>2</sup>

# NOMENCLATURE (Continued)

2	L	length of body, in
b/2	В	wing semi-span, in
b <sub>v</sub>	BV	vertical tail span, in
×	<b>x</b>	distance from component nose, in
y	<b>Y</b>	lateral distance from centerline, in
<b>Z</b>	<b>. Z</b>	vertical distance measured from W. L. 500 (vertical tail reference root chord), in
<b>.c</b>	C	local wing chord, in
c <sub>V</sub>	СУ	local vertical tail chord, in
x/2	X/L	longitudinal position/body length
x/c	X/C	local chordwise position/local wing chord length
x/c	X/CV	local chordwise position/local vertical tail chord length
η	2Y/B	local spanwise position/wing semi-span
η <sub>γ</sub>	Z/BV	local spanwise position/vertical tail span
ΔCp	DELCP	pressure coefficient increment due to power/plume effect, power on - power off
VCHEI	DCHEI	hinge moment coefficient increment for inboard elevon due to power/plume effect, power on-power off
∆CH <sub>EO</sub>	DCHEO	hinge moment coefficient increment for outboard elevon due to power/plume effect, power on-power off
	OFF LOW NOM HI	MPS and SRB power settings, see Tabulated Force Data for specific values of pressure ratio

# NOMENCLATURE (Concluded)

T <sub>TMPS</sub>		MPS air supply total temperature, °R
T <sub>TSRB</sub>		SRB air supply total temperature, °R
		Angles:
α <sub>N</sub> j		pitch-angle of nozzle centerline in a plane parallel to the plane of symmetry, degrees
Y <sub>N</sub> j		yaw-angle of nozzle centerline in a plane parallel to a waterline plane, degrees
Υ <sub>Ν</sub> j		pitch-angle of nozzle centerline in a plane which yaws with the nozzle, degrees
		Subscripts:
E	ELV	elevon
i		surface tap number
j		nozzle number
1	IB	inboard
0	ОВ	outboard
N		nozzle
1		top MPS nozzle
2		L. H. MPS nozzle
3		R. H. MPS nozzle
4		L. H. SRB nozzle
5		R. H. SRB nozzle
T		total condition

#### DATA REMARKS

Good data confidence can be attributed to Test IA19 on the basis of model and instrumentation performance throughout the test program.

Hinge-moment data, for the inboard and outboard elevons, should be good in all cases presented, as no particular anomalies occurred.

Surface pressure-tap data is also trustworthy, as very few taps consistently indicated any plugged or leaking conditions during repeated Scanivalve-system checks.

Some scatter and error, on the order of 2 percent of the maxima, is to be expected in the measured and computed SRB nozzle chamber-pressure parameters. Pressure variations during the runs account for some scatter, and a correction term had to be applied to precalibrated values when the pressure probes for the SRB nozzles failed during the test.

### CONFIGURATIONS INVESTIGATED

The 88-OTS model was a 0.02-scale representation of the Launch-Configuration Space Shuttle Vehicle 5, with Solid Rocket Motor and Main Propulsion System plume-simulation capability.

Various elevon settings and nozzle gimbal angles were set during the test to determine incremental effects of control deflections, as shown in the run-schedule (collation) sheets, Table 2.

Nozzle chamber-total pressures were controllable for appropriate plume-shape simulations. The nozzles were precalibrated by Rockwell.

The model was instrumented as follows:

- 1) 362 model surface pressure taps (See Table IV) monitored by 11 scavivalve modules in 3 gangs.
- 2) 5 nozzle chamber-total pressure probes monitored by large capacity transducers.
- 3) 5 nozzle exit-static pressure taps monitored on separate transducers.
- 4) Inboard and outboard elevon hinge-moment strain gauges on the left wing.
- 5) Total-temperature thermocouple probes in the SRM and MPS air-supply systems.
- 6) Pendulum dangeleometer mounted in the ET for angle-of-attack measurements.

The following nomenclature was used to designate model components:

Compone		Defintion
AT <sub>28</sub>	Attach	structure
AT <sub>31</sub>	Attach	structure
AT <sub>32</sub>	Attach	structure

### CONFIGURATIONS INVESTIGATED (Continued)

B<sub>62</sub> Body C<sub>12</sub> Canopy E<sub>52</sub> Elevon Body flap F<sub>10</sub> FL10 Feedline Feedline FL Aft attach cross beam FR<sub>10</sub> OMS pod M<sub>16</sub> MPS nozzles N<sub>87</sub> SRB nozzle N<sub>88</sub> OMS nozzles N<sub>89</sub> SRB protuberances PS<sub>11</sub> PS<sub>12</sub> SRB protuberances PS<sub>13</sub> SRB protuberances PS<sub>14</sub> SRB protuberances PS<sub>17</sub> SRB protuberances PS<sub>18</sub> **SRB** protuberances PS<sub>19</sub> SRB protuberances PT<sub>12</sub> ET protuberances

# CONFIGURATIONS INVESTIGATED (Concluded)

ET protuberances PT<sub>22</sub> ET protuberances PT<sub>23</sub> ET protuberances PT<sub>24</sub> ET protuberances PT<sub>25</sub> ET protuberances PT<sub>26</sub> ET protuberances PT<sub>27</sub> Rudder **R**<sub>5</sub> Solid rocket booster S<sub>22</sub> External tank T<sub>28</sub> Vertical tail **V**<sub>8</sub> Wing W<sub>127</sub>

### TEST FACILITY DESCRIPTION

The Ames Research Center Unitary Plan 11- by 11-foot Transonic Wind Tunnel is a closed-circuit, air-medium, variable-density facility capable of attaining Mach numbers from 0.6 to 1.4 at Reynolds numbers from 1.7 x  $10^6/\mathrm{ft}$  to 9.4 x  $10^6/\mathrm{ft}$ . The test section is 22 feet long, and models are installed on internal strain-gauge balances mounted to sting-type support systems.

Shadowgraph and Schlieren photographic equipment is available, and pressure transducer instrumentation is provided.

Tunnel operating temperature is 580°R. Extended high Reynolds number runs are restricted by power availability.

### DATA REDUCTION

The data reduction procedures for Test IA19 involve calculation of:

operating nozzle chamber-total and exit-static pressures and pressure ratios

for the SRB and MPS nozzles, elevon (inboard and outboard) panel hinge

moments and hinge-moment coefficients, and pressure coefficients for the 362

static taps on the Orbiter, External Tank, and Solid Rocket Boosters.

Equations used for reduction of data were as follows:

a) Elevon hinge moment:

$$c_{H_{EI}} = \frac{HM_{EI}}{q S_E c_E}$$

$$CH_{EO} = \frac{HM_{EO}}{q S_E \bar{c}_E}$$

$$C_{H_{ET}} = CH_{EI} + CH_{EO}$$

b) Nozzle pressure parameters:

$$CPR_{j} = \frac{Pc_{j}}{P_{\infty}}$$

$$j = 1 \rightarrow 5$$

$$EPR_{j} = \frac{Pe_{j}}{P_{-}}$$

c) Model pressure coefficients:

$$Cp_i = \frac{P_i - P_{\infty}}{q}$$

i = 101 - 172 Top of Rt. wing

i = 201 - 265 Bottom of Rt. wing

### DATA REDUCTION (Continued)

i = 301 - 389 Orbiter fuselage

i = 401 - 439 Rt. side of vertical tail

i = 501 - 573 External tank

i = 601 - 624 Rt. SRB

d) Base pressure coefficients:

The following reference dimensions and constants were used in the

### reduction of data:

Base Areas Model Scale, Ft <sup>2</sup>	Model Scale, Ft <sup>2</sup>	Model Scale, Ft <sup>2</sup>
$A_{369} = 0.0000$	$A_{541} = 0.0066$	$A_{558} = 0.0089$
$A_{370} = 0.0095$	$A_{542} = 0.0008$	$A_{559} = 0.0089$
$A_{371} = 0.0095$	$A_{543} = 0.0008$	$A_{560} = 0.0089$
$A_{372} = 0.0074$	$A_{544} = 0.0008$	$A_{561} = 0.0089$
$A_{373} = 0.0074$	$A_{545} = 0.0008$	$A_{562} = 0.0133$
$A_{374} = 0.0081$	$A_{546} = 0.0012$	$A_{563} = 0.0177$
$A_{375} = 0.0049$	$A_{547} = 0.0016$	$A_{564} = 0.0177$
$A_{376} = 0.0024$	$A_{548} = 0.0016$	A <sub>565</sub> = 0.0177
$A_{377} = 0.0049$	$A_{549} = 0.0016$	A <sub>566</sub> = 0.0177

# DATA REDUCTION (Concluded)

A <sub>378</sub> = 0.0081	$A_{550} = 0.0016$	$A_{567} = 0.0177$
$A_{379} = 0.0095$	A <sub>551</sub> = 0.0016	A <sub>568</sub> = 0.0177
$A_{380} = 0.0060$	$A_{552} = 0.0016$	$A_{569} = 0.0177$
$A_{381} = 0.0095$	$A_{553} = 0.0016$	$A_{570} = 0.0133$
$A_{621} = 0.0119$	$A_{554} = 0.0008$	$A_{571} = 0.0089$
$A_{622} = 0.0119$	$A_{555} = 0.0008$	$A_{572} = 0.0089$
$A_{623} = 0.0119$	$A_{556} = 0.0008$	$A_{573} = 0.0089$
$A_{624} = 0.0119$	A <sub>557</sub> = 0.0008	
Reference Dimensions	Full Scale	Model Scale
ĒÉ	90.7 in.	1.814 in.
SE	210 ft <sup>2</sup>	0.0840 ft <sup>2</sup>
	2690 ft <sup>2</sup>	1.076 ft <sup>2</sup>

T : 1A19			DATE : 9-24-74
	TEST CON	IDITIONS	
MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATUR (degrees Fahrenheit)
0.9	4.35 x 10 <sup>6</sup>	4.93	150
1.10	$4.64 \times 10^{6}$	5.83	150
1.25	$4.70 \times 10^{6}$	6.18	150
1.40	<b>4.55</b> x 10 <sup>6</sup>	6.32	150
BALANCE UTILIZED:	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF SF			
AF			
PM	ļ ————		
RM			
YM			
COMMENTS:			

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4	10		Ш	Ш	Ш						1.1		49	50	51				11	1
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19				Ш						1.25	18	19	20				
20					7		1		1	1.4	62	63	64				
21	OTS (WITH STRUT)		Ш		0	Ш	OFF		OFF	1.4	72	7.3	74				
22			Ш	Y			NOW		NOM	1.4	76	77	78				
23			Ш	0			OFF		OFF	0.9	100	101	102				
24			Ш	Ш			Ш			1.1	94	95	96				
25			Ш	Ш						1.25	88	89	90				
26							1		1	1.4	82	83	84				
27							NOM		NOM	0.9	97	98	99				
28										1.1	91	92	93				
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#### TABLE III MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT28

GENERAL DESCRIPTION: Rear orbiter to ET attach structure (LH and RH)

(2 members)

MODEL SCALE: 0.020

DRAWING NO.: VC78-000002

dimensions:		FULL SCALE	MODEL SCALE
Member #1	<b>X</b> o	1317.00	26.34
Attach Stations	Xo Yo Zo	- 96.50 (LH) 96.50 (RH) 267.50	
	X <sub>T</sub> Y <sub>T</sub> Z <sub>T</sub>	2058.00 - 125.68 (比) 125.68 (阳) 515.5	41.6 - 2.5136 (LE) 2.5136 (RH) 10.31
Member #2	<b>X</b> o	1317.00	26.34
Attach Stations	Ϋ́ο <b>Ζ</b> ο	- 96.50 (LH) 96.50 (RH) 267.50	
	XT YT	1872.00 - 125.68 (LH) 125.68 (RH)	37.44 - 2.5136 (比) 2.5136 (亞)
	ZŢ	504.5	10.09
Member #1 Dia.		11.5	0.230
Member #2 Dia.		15.5	0.31

MODEL COMPONENT: ATTACH STRUCTURE - AT31

GENERAL DESCRIPTION: Rear ET to SRB attach structure (LH & RH)

(3 members)

MODEL SCALE: 0.020

DRAWING NO.: VI.78-000063, VI.78-000062B, VI.78-000066

DIMENSIONS:		FULL SCALE	MODEL SCALE
Member ∦1	$\mathbf{x_{T}}$	2058.00 - 171.50 (LH) 171.50 (RH)	41.16 - 3.43 3.43
	$z_{ m T}$	457.00	9.14
	X <sub>S</sub>	1511.00	30.22
	Y <sub>S</sub>	53.24	1.0648
	Z <sub>S</sub>	57.00	1.14
Member #2	X <sub>T</sub>	2058.00	41.16
	Y <sub>T</sub>	- 163.85	- 3.277
	Z <sub>T</sub>	449.81	8.996
	X <sub>S</sub>	1511.00	30.22
	Y <sub>S</sub>	76.56	1.5312
	Z <sub>S</sub>	15.73	0.3146
Member #3	X <sub>T</sub>	2058.00	\$1.16
	Y <sub>T</sub>	- 161.72	- 3.23\$4
	Z <sub>T</sub>	343.00	6.86
	X <sub>S</sub>	1511.00	30.22
	Y <sub>S</sub>	53.24	1.06\$8
	Z <sub>S</sub>	- 57.00	- 1.14

MODEL COMPONENT: ATTACH STRUCTURE - AT32

GENERAL DESCRIPTION: Forward orbiter/ET attach structure (2 member structure)

MODEL SCALE: 0.020

DRAWING NUMBER: VC78-000002

dimensions:	FULL SCALE	MODEL SCALE
Member #1 X <sub>o</sub>	388.15	7.763
	0.0	0.0
	LWR ML	LWR ML
	1129.9	22.598
$\mathbf{Y_T}$	46.50	0.930
$oldsymbol{z_1}$	<b>562.</b> 58	11.252
Member #2 X <sub>o</sub>	388.15	7.763
	•	0.00
$oldsymbol{z}_{oldsymbol{c}}$	LWR ML	LWR ML
<b>X</b> 1	1129.9	22.598
$\left\{ \begin{array}{ll} \left( \left( \frac{1}{2} + \frac{1}{2} \right)^{2} + \frac{1}{2} + $	- 46.50	- 0.930
$oldsymbol{z}_{oldsymbol{q}}$	562,58	11.252
Diameter of members (In.):	6.0	0.120

GENERAL DESCRIPTION:		
to 140A/B except with revised aft body.		
MODEL SCALE: 0.020		
DRAWING NUMBER: VI.70-000140C.	00200B, -00202C,	-000203, -0002052
DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length (OML: Fwd Sta X <sub>o</sub> = 235), In.	_1293.3_	25.866
Max. Width (@ X <sub>o</sub> = 1528.3), In.	264.0	5.280
Max. Depth (@ $X_0 = 1464$ ), In.	250.0	5.000
Fineness Ratio	4.899	4.899
Area - Ft <sup>2</sup>		
Max. Cross-Sectional	340.885	0.136354
Planform		
Wetted		
Raco		

GENERAL DESCRIPTION: Configuration 1400	orbiter canopy	used with
Body - R <sub>62</sub>		
MODEL SCALE: 0.020 .	<u> </u>	
DRAWING NUMBER VII70-000140C, -	00202R -000201	
DIMENSION:	FULL SCALE	MODEL SCALE
Length (X <sub>o</sub> = 434.643 to 576), In.	143.357	2.867
Max Width (@ X = 513.127), In.	152.412	3.048
Max Depth (@ Z <sub>o</sub> = 501 to 449.39), In.	51.61	1.032
Finaness Ratio		
Area		
Max Cross-Sectional		· ·
Planform		
Wetted		
en de la companya de La companya de la co		:

MODEL COMPONENT ELEVON - E52		
GENERAL DESCRIPTION Flevon for Co	nfiguration 140	C. Hingeline.
at X <sub>o</sub> = 1387, elevon split line X <sub>o</sub> = 31	2.5, 6.0" gaps.	beveled edges, and
centerbodies.		
MODEL SCALE: 0.020		
DRAWING NUMBER	o006092. SSA	-01260
DIMENSIONS (Data for one side)	FULL SCALE	MODEL SCALE
Area - Ft <sup>2</sup>	210.0	0.0820
Span (equivalent), In.	340.2	6.984
(Y <sub>0</sub> =119.99), In. Inb'd equivalent chord, In.	118.0	2 360
(Y <sub>0</sub> = 469.19) Outb'd equivalent chord, In.	55.19	1.1038
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.2095	0.2096
At Outb'd equiv. chord	0.4004	0.4004
Sweep Back Angles, degrees		
Leading Edge	2.)	0.0
Trailing Edye	10.055	<u>- 1.0.056</u>
Hingeline	0.00	0.00
(Product of Area & c) Area Moment (Normal সমস্থান সংগ্রাম প্র	1587.25	0.012698
Mean Aerodynamic Chord, In.	90.7	1.814
Hingeline dihedral (origin at $Z_0 = 261.3509$ ), deg.	5.228986	5.228986

MODEL COMPONENT: BODY FLAP - F10		
GENERAL DESCRIPTION: Configuration140	C Body Flap. Hin	geline located
at X = 1532, 7 = 287.00		
MODEL SCALE: 0.020 MODEL DR	MING: 38-401261	
DRAWING NUMBER		
DIMENSION:	FULL SCALE	MODEL SCALE
Length(X <sub>0</sub> =1525.5 to 1613), In.	87.50	1.750
Max Width(@ L.E. X = 1525.5), In.	256.00	5.120
Mox Depth (@ X = 1532), In.	19.798	0.39596
Fineness Ratio		
Area - Ft <sup>2</sup>		
Max Cross-Sectional	35.196	0.0140784
Planform	135.00	0.0540
Wetted		
Base (X <sub>o</sub> = 1613)	4.89	0.001956
Base (X <sub>0</sub> = 1613)	4.89	0.001956

MODEL COMPONENT: FEEDLINE FL10

GENERAL DESCRIPTION: LH2 feedline on upper left-hand side of T28

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, VL78-000062B

Diameter of line (17.0 I.D.)

DIMENSIONS:		
Leading edge at:	FULL SCALE	MODEL SCALE
	2071.5	41.430
	- 70.0	- 1.400
	573.934	11.479
Trailing edge at: $X_{T}$	2081.8	41.636
	- 70.00	- 1.400

 $z_{\mathrm{T}}$ 

**584.0**59

18.160

11.682

0.3632

MODEL COMPONENT: FEEDLINE - FL

GENERAL DESCRIPTION: LO2 feedline on upper right-hand of T28.

MODEL SCALE: 0.020

DRAWING NUMBER: VL78-000063, VL78-000062B

dimensions:	FULL SCALE	MODEL SCALE
Leading edge at:	1000.667	20.013
	<b>70.0</b> 0	1.400
	<b>150.5</b> 19	3.010
Trailing edge at: $X_{f T}$	2071.5	41.43
	70.00	1.400
	573.934	11.479
Diameter of line (17.0 I.D.)	18.16 o.d.	0.3632

MODEL COMPONENT: FAIRING - FR10

GENERAL DESCRIPTION: Aft attach cross beam

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, VL78-000062B, MArtin Marietta 82600207000

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading	edge at X <sub>T</sub>	2052.0	41.04
Length		193.00	3.86
Width	ng kanalang tingga panggan panggan panggan panggan panggan. Panggan tanggan panggan pangga	15.00	0.30

GENERAL DESCRIPTION: Configuration 140	C UMS Pod	
MODEL SCALE: 0.020 .		
DRAWING NUMBER . VI.70-008401 . V	170-008410 (as d	of 5/16/75)
DIMENSION:		
Length (OMS Fwd Sta. Ko=1310.5), In.	258.50	5.170
Mox Width (@ X <sub>0</sub> = 1511), In.	136.80	2.736
Max Depth (@ X <sub>0</sub> = 1511), In.	74.70	1.494
Fineness Ratio	2.484	2.484
Arec - Ft <sup>2</sup>		
Max Cross-Sectional	58.864	0.02355
Planform		
Wetted		

MODEL COMPONENT: MPG NOZZLES - N 87		
GENERAL DESCRIPTION: Flow-through MPS	nozzles with gimbal	capability.
here is a metric shroud around each nozz	le for measuring him	ge moments abo
he gimbal point.		
MODEL SCALE: 0.020		
DRAWING NUMBER: SS-A01261		
dimensions:	FULL SCALE	MODEL SCALE
MACH NO. (0.6, 0.9, 1.1, 1.25, 1.4)		
Length - In.		
Gimbal Point to Exit Plane Throat to Exit Plane	157.0 181.55	2.14
	<del>-101-99</del>	3-0311
Diameter - In. Exit	<u> </u>	_1.8087
Throat	23.3502	0.467004
Inlet		
Area - ft <sup>2</sup> Exit	lul. Com	a areol.
Throat	<u>44.607</u> <u>2.974</u>	0.01784 0.0011895
Gimbal Point (Station) - In.		
Upper Nozzle		
$\hat{\mathbf{r}}_{\hat{\mathbf{o}}}^{\hat{\mathbf{o}}}$	1445	<u>28.99</u>
	14143	8.86
Lower Nozzles		
	1468.17	29.3634
$egin{array}{c} \mathbf{Yo} & \mathbf{Zo} \\ \mathbf{Zo} & \mathbf{Zo} \end{array}$	<u><b>≛</b> 53.0</u> 3kg,6k	1.06 6.8528
Null Position - Deg.		
Upper Nozzle		
Pitch Yaw	$\frac{1.6^{\circ}}{0}$	169
Lower Nozzle Pitch	100	10 <sup>0</sup>
Yaw	OUTB'D 3030'	OUTB'D 30301

MODEL COMPONENT: SRB NOZZLES - N88		· · · · · · · · · · · · · · · · · · ·
GENERAL DESCRIPTION: Flow through SRB	nozzle with gimbal	capability.
Simulator € = 7.0 prototype. There is a	metric shroud around	i each nozzle
for measuring hinge moments about the gimb	pel point	
MODEL SCALE: 0.020		•
DRAVING NUMBER: SS-A01262		
DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In. Gimbal Point to Exit Plane Throat to Exit Plane	86.8 _112.135	1.736 2.2427
Diameter - In. Exit Throat Inlet	144.290 64.53	2.88580
Area - ft <sup>2</sup> Exit Throat	356.738 22.712	0.14269 0.090847
Gimbal Point (Station) - In. Upper Nozzle		
$egin{array}{c} \mathbf{X_B} \\ \mathbf{Y_B} \\ \mathbf{z_B} \end{array}$	1002.5 + 250.5	38.052
Lower Nozzles X Y		
Null Position - Deg. Upper Nozzle Pitch Yaw		
Lower Nozzle Pitch Yaw		

NERAL DESCRIPTION: OMS nozzle in stowed position		S- And down /
from null position. Use with M16.		
DEL SCALE = 0.020		
AWING NO. SS-AD1288		
PARTY TOSTS	FULL SCALE	MODEL SCALE
INENS IONS		
Mach No.		
Length ~ in.		
Gimbal Point to Exit Plane	56.0	1.120
Throat to Exit Plane		
Diameter~iu.		
Exit (0.D.)	50.0	1.0
Throat		
Inlet		
Area ~ft <sup>2</sup> .		
ordinal ali di <b>Ekste</b> lla e la comita de la comita del comita de la comita del la comita de la comita del la comita de la comita del la c		
Throat		
Gimbal Point (station)~in.		
. : : 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1518.00	<u>30.35</u>
1.	_88.0	1.76
[1982] 기타 <mark>7</mark> 일	492.0	9.84
Null Position~deg.		
기다. 그리면 된		150kg:
시 : : : : : : : : : : : : : : : : : : :	6°30!	<u>6°30!</u>

MODEL COMPONENT: ELECTRICAL TUNNEL - PS11

GENERAL DESCRIPTION: Tunnel running longitudinally on the SRB for electrical

wires.

MODEL SCALE: 0.020

DRAWING NO.: VC77-000002

dimensions:		FULL SCALE	MODEL SCALE
Width, Ir	1	5.70	0.114
Radius, 1	în.	5.70	0.114
Height, 1	in.	4.70	0.094
Leading e	edge at Sta.	494.70	9.894
L.E. swee	pback angle, degrees	30.0	30.0

MODEL COMPONENT: CIRCUMFERENTIAL STIFFENER- PS12

GENERAL DESCRIPTION: Four ring stiffeners located at the aft end of the

solid rocket boosters. The stiffener is a curved I-beam.

DRAWING NO.: VC77-00002

MODEL SCALE: 0.020

DIMENSIONS:		FULL SCALE	MODEL SCALE
Height, In.		2.5	0.05
Length, In.		2.0	0.04
Locations:	X <sub>B</sub> =	1602.00	32.04
		1644.00	32.88
		1729.00	34.58
		1771.00	35.42

MODEL COMPONENT: CIRCUMFERENTIAL STIFFENER - PS13

GENERAL DESCRIPTION: Ring stiffener located at the point where the skirt

flares. The stiffener is I-beam.

MODEL SCALE: 0.020

DRAWING NO .: VC77-000002

DIMENSIONS:			FULI	SCALE	MODEL S	CALE
Height, In.				6.50	0.	130
Length, In.				4.00	0.	08
Location centerli	ine	x <sub>B</sub> =	1	833.70	36.	674

MODEL COMPONENT: SOLID ROCKET BOOSTER - EXTERNAL TANK ATTACH - PS14

GENERAL DESCRIPTION: Two-ring stiffeners located at aft end of solid rocket

boosters. The stiffener is curved I-beam.

MODEL SCALE: 0.020

DRAWING NO.: VC77-000002

DIM	ensions:	2	FUL	L SCALE	MODEL SCALE
	Height, In.			8.00	0.160
	Length, In.			3.00	0.060
. · · .	Location cen	terline	X <sub>B</sub> 1	1511.00	30.22

MODEL COMPONENT: SRB PROTUBERANCE - PS17

GENERAL DESCRIPTION: Electrical connecting box mounted on top of PS14.

MODEL SCALE: 0.020

DRAWING NO.: NONE

DIMENSIONS:

Width, In.

60.0

Depth, In.

17.5

0.35

Centerline of box located 15° inboard from vertical plane of symmetry.

MODEL COMPONENT: SRB PROTUBERANCE - PS18

GENERAL DESCRIPTION: Tie-down fixtures mounted on the aft skirt. Total of

four mounted 30° on both sides of vertical plane of symmetry.

MODEL SCALE: 0.020

DRAWING NO.: NONE

DIMENSIONS:		FULL SCALE	MODEL SCALE
Sta. of	leading edge (XB)	1861.2	37.224
Sta. of	T.E. (XB)	1925.2	<b>38.</b> 504
Max. wi	ith, In.	14.2	0.284
Height,	in.	8.3	0.166

MODEL COMPONENT: SRB PROTUBERANCES - PS19

GENERAL DESCRIPTION: Aft separation motor pod mounted on aft skirt at 20° inboard from top vertical plane of symmetry.

MODEL SCALE: 0.020

DRAWING NO .: NONE

DIMENSIONS:	FULL SCALE	MODEL SCALE
Width, In.	14.0	0.28
Height, In. (at Trailing edge)	19.0	0.38
Sweepback of leading edge, deg.	15.0	15.0

MODEL COMPONENT: ET PROTUBERANCE - PT12

GENERAL DESCRIPTION: Lightning rod attached to ET nose.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000068A

DIMENSIONS:		<u>F</u>	TL SCALE	MODEL SCALE
Length			30.90	0.618
Diameter,	In.		3.20	0.074

MODEL COMPONENT: ELECTRICAL CONDUIT PT22

GENERAL DESCRIPTION: Left-hand electrical conduit line on T28.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, VL78-000062B

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge a	t: X <sub>T</sub>	1084.333	21.687
	YŢ	- 99.591	- 1.992
	<b>2T</b>	- 139.620	- 2.792
Trailing edge	at: X <sub>T</sub>	2058.000	41.16
	YT	- 99.591	- 1.992
大い大学的では、 Constant of the August Aug August August	$z_{\mathbf{T}}$	- 139.620	- 2.792
Conduit size:		2.0 x 6.0	0.04 x 0.12

Centerline of line located radially at  $\phi = 35.5^{\circ}$ 

MODEL COMPONENT: LO2 RECIRCULATION LINE - PT23

GENERAL DESCRIPTION: LO2 recirculation line on right-hand upper side of T28.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, VL78-000062B, Martin Marietta 82600207000

dimensions:		FULL SCALE	MODEL SCALE
Leading edge at	.: X <sub>1</sub>	1040.667	20.813
	Yı	94.169	1.883
	<b>Z</b> ŋ	<b>540.9</b> 34	<b>10.8</b> 19
Trailing edge a	at: X <sub>1</sub>	2062.920	41.258
	Yı	70.000	1.400
	2	573.934	11.479
Diameter of Li	ne	4.0	0.08

Centerline of lines located radially at  $\phi = 33^{045}$ . (Right of TDC looking forward).

MODEL COMPONENT: LH2 PRESSURE LINE - PT24

GENERAL DESCRIPTION: LH2 pressure line on T28.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, VL78-000062B, Martin Marietta 82600207000

dimensions:		FULL SCALE	MODEL SCALE
Leading edge at:	$\mathbf{x_T}$	1040.667	20.813
	$\mathbf{Y_T}$	- 94.169	- 1.884
	$\mathbf{z_{T}}$	540.934	10.819
Trailing edge at:	$\mathbf{x_{T}}$	2062.920	41.258
	Yn	- 70.00	-1.40
	$oldsymbol{z_T}$	573-934	11.479
Diameter of line		4.0	0.080

Centerline of line located radially at  $\phi = 33^{\circ}45^{\circ}$  (Left of TDL looking forward)

MODEL COMPONENT: ELECTRICAL CONDUIT PT25

GENERAL DESCRIPTION: Right-hand aft electrical conduit line on T28with,

LH2 pressure sensor line and LO2 vent valve actuator line.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, VL78-000062B, Martin Marietta 82600207000

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	$\mathbf{x_T}$	1084.333	21.687
	$\mathbf{Y_T}$	99.591	1.992
	$\mathbf{z_T}$	139.620	2.792
Trailing edge at:	X <sub>T</sub>	2058.00	41.160
	$\mathbf{Y_T}$	99.591	1.992
	$\mathbf{z_T}$	139.620	2.792
Conduit size		2.0 x 6.0	0.4 x 0.12

Centerline of line located radially at  $\emptyset = 35.5^{\circ}$ 

MODEL COMPONENT: LO2 PRESSURE LINE - PT26

GENERAL DESCRIPTION: LO2 pressure line on the T28.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, VL78-000062B, Martin Marietta 82600207000

DIMENSIONS:			-01000
		FULL SCALE	MODEL SCALE
Leading edge at:	<b>X</b> T	360.733	7.215
	YT	15.145	0.3029
	Z <sub>T</sub>	407.718	8.154
Trailing edge at:	XT	<b>20</b> 63.5	41.670
	Ym	63.25	1.265
	<b>z<sub>T</sub></b>	609.00	12.180
Centerline of line loca	ted radially at @	s = 27°	
Line diameter		2.0	0.040

MODEL COMPONENT: ELECTRICAL CONDUIT PT27

GENERAL DESCRIPTION: Electrical conduit on the right-hand forward section

of T<sub>28</sub>.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000062B

<b>360.7</b> 33 7.215
11.549 0.2310
412.474 8.249
876.273 17.525
226.114 4.522
646.774 12.935
ľ

# \*REVISED 6/1/74

MODEL COMPONENT RUDDER - R5		
GENERAL DESCRIPTIONConfiguration	on 1400 rudder.	
MODEL SCALE: 0.020		
DRAWING NUMBER		
DIMENSIONS	FULL SCALE	MODEL SCALE
Area - Ft <sup>2</sup>	_100.15	0.04006
Span (equivalent) , In.	201.00	4.02
Inb'd equivalent chord , In.	91.585	1.832
Outb'd equivalent chord, In.	50_833	1_017
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0_4:00	<u> </u>
Sweep Back Angles, degrees	<del></del>	
Leading Edge	34.83	34.83
Trailing Edge	_ 26.25	26.25
Hingeline (Product of area & c	)34.83	_34.83
Area Moment (Normalizations), F	t <sup>3</sup> _610.92	0.00489
Mean Aerodynamic Chord, In .	73.2	1.464

MODEL COMPONENT : SOLID ROCKET BOOST	ER - S <sub>22</sub>	· · · · · · · · · · · · · · · · · · ·
GENERAL DESCRIPTION : SOLID ROCKET		
MODEL SCALE: Q.020		
DRAWING NUMBER VITT-000002, VCTO	-000002	
DIMENSIONS:	FULL SCALE	MODEL SCALE
Length, In.	1789.6	35.792
Mox Width (Body dia), In.	146.0	2.92
Max Depth (aft shroud dia., )	208.2	4.164
Fineness Ratio	8.596	8.596
Area - Ft <sup>2</sup>		•
Max. Cross-Sectional	236.423	0.094569
Planform		
Wetted		
Base W.P. of SRB Centerline ( $\mathbb{Z}_{\mathrm{T}}$ )	400,00	8.0
F.S. of SRB Centerline $(X_T)$	743.0	14.86
B.P. of SRB Centerline $(Y_T)$	250.5	5.01

MODEL COMPONENT: EXTERNAL TANK	- T <sub>28</sub>	
GENERAL DESCRIPTION:		
DRAWING NUMBER . VC70-000	002, 7078-000002	
DIMENSION:	FULL SCALE	MODEL SCALE
Length, In.	1844.275	36.8855
Max Width, Dia., In.	331.00	6.620
Mox Depth	<u> </u>	-
Fineness Ratio	5.687	5.687
Area		
Max Cross-Sectional	594.678	0.23787
Planform ·		
Wetted		1
Base		•

ENERAL DESCRIPTION: Configuration 140C ve	rtical tail.	
PARET CONTEN A COO		
ODEL SCALE: 0.020		
RAWING NUMBER: VL70-000146B W/O Dragchute		
otmensions:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft <sup>2</sup>	413.253	0.2053
Planform	315.72	7.3144
Span (Theo) - In.	1.675	1.675
Aspect Ratio	0.507	0.507
Rate of Taper Taper Ratio	0.404	0.404
Sweep-Back Angles, Degrees.		
Leading Edge	45.000	45.000
Trailing Edge	26.25	26.25
0.25 Element Line	41.13	41.13
Chords:		•
Root (Theo) WP	268.50_	5.370
Tip (Theo) WP	108.47	2.1694
MAC	199.81	<b>3.9</b> 962
Fus. Sta. of .25 MAC	1463.35	
W.P. of .25 MAC	635.52	12.710
B.L. of .25 MAC	0.0	0.0
Airfoil Section		10.0
Leading Wedge Angle - Deg.	10.0 14.92	
Trailing Wedge Angle - Deg.	2.0	0.01
Leading Edge Radius		. <u> </u>
Void Area- Ft <sup>2</sup>	13.17	0.00526
	0.0_	0.0
Blanketed Area		

MODEL COMPONENT: WING-W

ng W <sub>136</sub> but with refinements. Improved wing-box = 1546); elevon split line relocated from V <sub>0</sub> =	ot-midbody fairi 281 to Y <sub>o</sub> = 312	ng (X =940 to
MODEL SCALE: 0.020	NAC NO 1772	2001100
		0-000140C000
ENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA	i i i i i i i i i i i i i i i i i i i	
Area (.neo.) Ft <sup>2</sup>		
Planform	2690.00	1.076
Span (Theo In.	936.58	18.733
Aspect Ratio	2.265	2.265
Rate of Taper Taper Ratio	1.177	1.177
Dihedral Angle, degrees	0.200	0_200
Incidence Angle, degrees	3.500	3_500
Aerodynamic Twist, degrees	3.000	3.000
Sweep Sack Angles, degrees	للاثند	ـــلقائنت
Leading Edge	45.000	45.000
Trailing Edge	- 10.056	- 10.056
0.25 Element Line	35,209	35,209
Chords:		
Root (Theo) B.P.O.O.	689.24	13.785
Tip, (Theo) B.P. MAC	137.85	2.757
Fus. Sta. of .25 MAC	474.81	<u>9496</u>
W.P. of .25 MAC	1136_83	22.737
B.L. of .25 MAC	182 12	5.812 3.643
EYDACEA AATA		<del></del>
Area (Ineo) Ft <sup>2</sup>	1751.50	0.7006
Span, (Theo) In. BP108	720.68	14.414
Aspect Ratio	2.059	2.050
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.02	11.260
1;p 1.00 5	13,43	
MAC 2	392.83	7.857
Fus. Sta. of .25 MAC	1185,78	22 720
W.P. of 25 MAC	294.30	5 .885 · ·
B.L. of .25 MAC	251.77	5.035
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root b =	0.113	ــــــــــــــــــــــــــــــــــــــ
Tip b =	0.120_	0.120
ta for (1) of (2) Sides		
Leading Edge Cuff Planform Area 5t2	113.18	0.0050
Leading Edge Intersects Fus M. L. 0 Sta	500.00	10.00
Leading Edge Intersects Wing O Sta	1024.00	20.480

Table IV Orbiter Fuselage Pressure Cap Numbers and Locations

NO OF TAPS	RADIAL LOCATION ~ ∅, DEGREES									ORBITER X · IN.			
	180 -	195	210	225	240	255	270	290	320	0	x <sub>o</sub> /L <sub>B</sub>	MODEL SCALE	FULL
3			301				302	303		See 19 5	0.500	17.60	880
8	304	305	306	307	308	309	310	311	312		0.653	21.60	1080
8	313	314	315	316	317	318	319	320	321		0.730	23.60	1180
10	322	323	324	325	326	327	328	329	330		0.781	24.90	1245
10	331	332	333	334	335	336	337	338	339		0.823	26.00	1300
9		340	341	342	343	344	345	346	347	348	0.882	27.50	1375
9		349	350	351	352	353	354	355	356	357	0.923	28.60	1430
9		358	359	360	361	362	363	364	365	366	0.963	29.60	1480
_2	POD)	OMS 1	ion off	LOCAT	367	368	POD	OMS	ION OF	LOCAT	1.002	30.60	1530

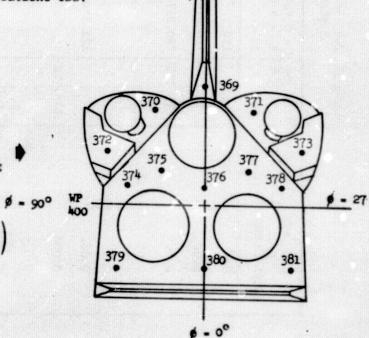
	Ver	tical W	$L \sim Z_0$				x/c <sub>v</sub> ^	LOCAL C	HORD			
	FULL SCALE	MODEL SCALE	$\eta_{v}$	0	0.025	0.050	0.150	0.300	0.520	0.750	0.900	NO.
	550	11.0	0.158	401	402	403	404	405	406	407		7
RIGHT	600	12.0	0.316	408	409	410	411	412	413	414	415	8
	690	13.8	0.600	416	417	418	419	420	421	422	423	8
SIDE	765	15.3	0.840	424	425	426	427	428	429	430	431	8
	792	15.84	0.925	432	433	434	435	436	4377	438	439	8
									TOTAL	VERTICAL		39

BODY FLAP ORBITER ~ X φ∼ DEGREES 67 FULL MODEL SURFACE 320 NO. SCALE SCALE TAPS 1555 31.1 UPPER 382 383 2 1555 31.1 386 387 LOWER 2 1590 31.8 384 385 UPPER 2 1590 31.8 LOWER 389 2 .1. TOTAL BODY FLAP

NOTE: Base Pressure Tap Locations TBD.

OMS PODS
VERTICAL &
ORBITER BASE

(13 TAPS)



Ø = 180°

Table V Orbiter Base, Vertical Tail and Body Flap Pressure Tap Numbers and Locations

Table VI Orbiter Right Wing Pressure Tap Numbers and Locations

RIGHT WING X/C LOCAL CHORD	$ \eta = 0.299  Y_0 = 2.8  in M.S. $	$7 = 0.364$ $Y_0 = 3.4$ IN M.S.	$ \eta = 0.427  Y_0 = 4.0  IN M.S. $	$ \eta = 0.534  Y_0 = 5.0  IN M.S. $	$ \eta = 0.641  Y_0 = 6.0  IN M.S. $	$ \eta = 0.780  Y_0 = 7.30  IN M.S. $	$\eta = 0.887$ $Y_0 = 8.3$ IN M.S.
0*	101	112	118	131	144	155	164
0.02		V	119,216	132,228	145,240	156,250	165,258
0.04	-	113,211	120,217				
0.05	102,201			133,229	146,241	157,251	166,259
0.08				134,230			
0.081			121.218				
0.086		114,212					
0.094	103,202						
0.150				135,231	147,242	158,252	167,260
0.163		115,213					
0.177			122,219				
0.229	104,203						
0.246	and a second	116,214					
0.250				136,232	148,243	159,253	168,261
0.274	State Spring		123,220				
0.362	105,204						
0.390		117,215			à constant		,
0.400				137,233	149,244		169,262
0.402			124,221				
0.497	106,205						

<sup>\*</sup> TAPS AT X/C = O ARE LOCATED ON WING LEADING EDGE

NOTE: 100 SERIES NUMBERS LOCATED ON TOP OF WING.

200 SERIES NUMBERS LOCATED ON BOTTOM OF WING.

Table VI (Continued)

RIGHT WING X/C		$ \eta = 0.364  Y_0 = 3.4  IN M.S. $	$ \eta = 0.427 $ $ Y_0 = 4.0 $ IN M.S.		$ \eta = 0.641  Y_0 = 6.0  IN M.S. $		$ \eta = 0.887  Y_0 = 8.3  IN M.S. $
0.55				138,234	150,245		
0.565			125,222				
0.60							170,263
0.65						160,254	
0.70	107,206				151,246		
0.725				139,235			
0.75						161,255	171,264
0.760			126,223				
0.775				140,236	152,247		
0.808			127,224				
0.834	108,207						
0.85				141,237	153,248	162,256	
0.857			128,225				
0.865	109,208						
0.90	110,209			142,238			172,265
0.905			129,226		154,249		
0.95				143,239		163,257	
0.953			130,227				
0.965	111,210						

NOTE: 100 SERIES NUMBERS LOCATED ON TOP OF WING

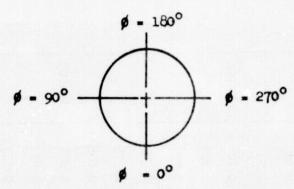
200 SERIES NUMBERS LOCATED ON BOTTOM OF WING

TOTAL NUMBER OF TAPS = 137

Table VII External Tank Pressure Tap Numbers and Locations

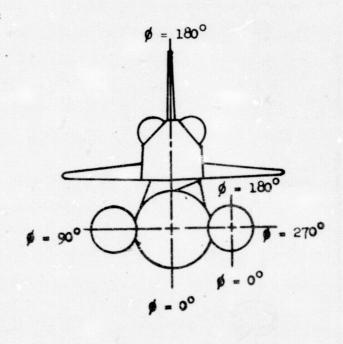
ET S	ET STATION ~ XT										ø ∼ DEGREES							
FULL SCALE	MODEL SCALE	$x_{\mathbf{T}} / \ell_{\mathbf{T}}$	0	30	60	90	120	135	150	165	180	195	210	225	240	270	300	330
1500	30.0	0.634				502										501		
1700	34.0	0.742		504	505	506	507	508	<b>50</b> 9	510						503		
1900	38.0	0.851	518	519	520	521	522	523	524	525		511	512	513	514	515	516	517
2040	40.8	0.986	533	534	535	536	537	538	539	540		526	527	528	529	530	531	532
TANK I	BASE @ C										541							
TANK I	BASE @ 1	3 RAD	550	551	552	553	554	555	556	557	542	543	544	545	546	547	548	549
TANK I	BASE @ 2/	3 RAD	566	567	568	569	570	571	572	573	558	559	560	561	562	563	564	565

TOTAL NO. TAPS= 73



VIEW LOOKIG VIEW LOOKING FORWARD

SRB	STATION -	~ x <sub>B</sub>		φ	~ DEGR	EES	
FULL SCALE	MODEL SCALE	х <sub>в</sub> / <b>/</b> в	0	90	180	270	NO. TAPS
1.450	29.0	0.700	603	604	601	602	4
1650	33.0	0.811	607	608	605	606	4
1850	37.0	0.923	611	612	609	610	4
1890	37.8	0.945	615	61.6	613	614	4
1930	38.6	0.968	619	620	617	618	4
	Si	CIRT BASE	623	624	621	622	4
		T	OTAL	NO. SF	B TAPS		24



L = 1789.6 infs =35.792 inms

ET & SRB RADIAL LOCATIONS

#### Notes:

 Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows

 For clarity, origins of wind and stability axes have been displaced from the center of gravity

c<sub>l,w</sub>

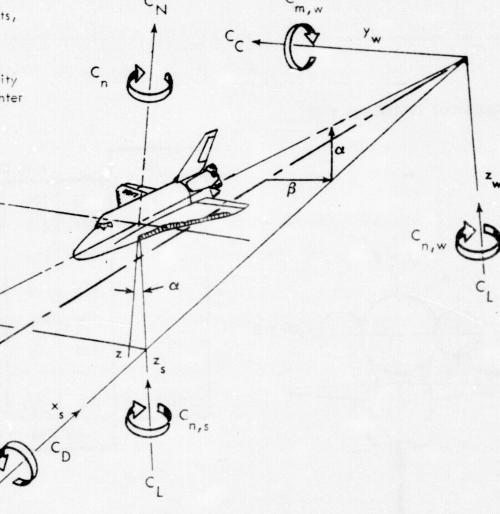
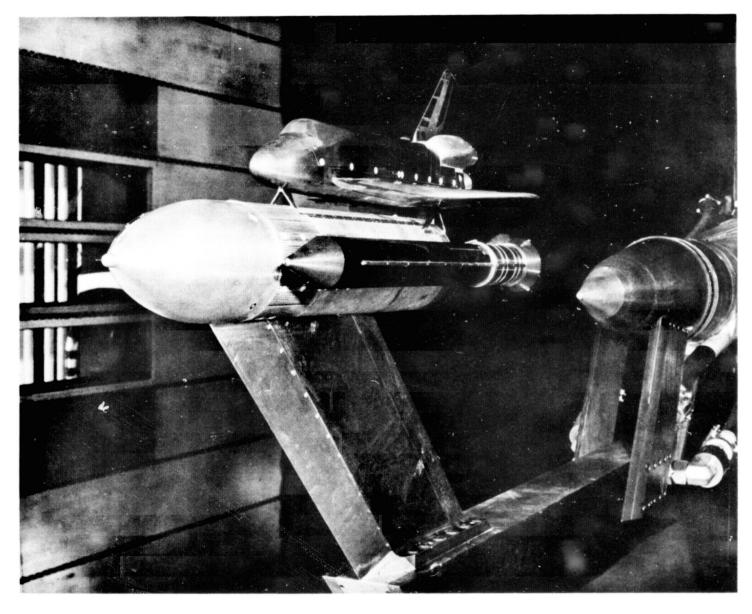


Figure 1. - Axis systems.

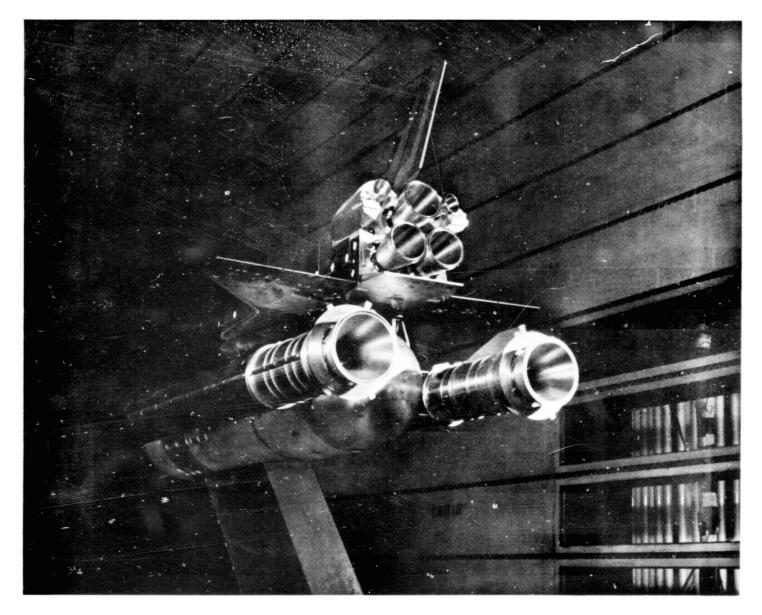
72

73



a. Model 88-OTS Installation, Front View

Figure 3. - Model photographs.



b. Model 88-OTS Installation, Rear ViewFigure 3. - Concluded.

# APPENDIX TABULATED SOURCE PRESSURE DATA

## PRECEDING PAGE BLANK NOT FILMED

Tabulations of plotted data are available on request from Data Management Services.

(1)

4,000 .900

#### ARE11-0141A19 OTS+STRUT SRB-OFF MFS-OFF VERTICAL

(REUVO1) ( 19 OCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

SREF	= 569	00000.0	SQ.FT.	XMRP	Ŧ	976.0000	IN. XT					ELV-1B	= '	8.000	ELV-QB	= .
	= 129			YERF	=	.0000	IN. YT					RUDDER	z	.000	MACH	=
PREF	= 129	0.3000	IN.	ZMRP	=	400.0000	IN. ZT					GIMBAL	=	1,000		
SCALE	=	.0200														
							100									
SECT	10N ( 1	VERTIC	AL			CEP	ENCENT V	ARIABLE C	P							
			DETA	4			7.00				:_					
ALITTA	(1) =	+3.993	) BEIA	(1)	= .:	000	Z/BV	1 59	.316	• 600	.840	.925				
							X/CV						_			
							.000	. 5238				431				
							-025			3991						
							-050			3491						
							-150			1544						
							•300			1830						
taris							- 520			3280						
							. 750	2948		4714						
							•900		2745	3432	- 2942	174	5			
AI CHA	( 2) =	- 046	DETA			200	7.00									
אבייוא		516	DETA	17	= -4.1	סוא	Z/BV X/CV	-1 58	.316	.600	.840	.925				
							.000	3881	.3165	.3188	.2658	.2356				
							.025			8977						
1.0							.050			- 8926						
	-						153			8800						
							300			7565						
							. 520			5998						
							. 750			4429						
							.900			2699						
									101.05		,	V 2 34/4				
ALPHA	(2) =	336	BETA	(2):	<b>.</b>	206	Z/BV	.158	.316	. 600	-8417	925				
				-			X/CV					• 52.5				
							.000	.4827	.3336	.3504	. 4260	3847				
							.025	_		-,4207		7				
							.050			3701						
							150			1753						
							300			1745						
	dia di						520			- 3193						
	5						. 750			4634						
	•						.900			2552						
										-2332	4 C (***)					
ALPHA	(2) =	222	BETA	(3) :	4.0	25	Z/BV	.158	-316	.009	.840	.925		,		
					- //		X/CV				45.44.	. 26.3				
							.000	.3808	·21 @1	.1408	.2023	.1565				
								- 0000	- F 1 CC)	** 400	15:153	•1 202				

.1762

.1542

.0787

.1244

.0610

-.2707 -.2801 -.4891 -.6959 -.6247

-.0193 -.0327 -.0793 -.1628 -.1719 -.2092 -.2392 -.2147 -.3845

-.2352 -.2539 -.4223 -.3172

.2693

.1201

.050

-150

.300

. 520 . 750

.900

.1320

.1152

.9500 -.0337

.1227

.0509



DATE OI MAY 75

## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-0141A19 OTS+STRUT SRB-OFF MIS-OFF VERTICAL

(REUVO1)

SECTION ( 1) VERTICAL

ALPHA (3) = 3.948 BETA (1) = .000	Z/BV X/CV	-1 58	.316	.609	.840	.925
	.000	.4619	.2699	.2877	.3618	.3121
	.025	- 2023	2802	3809	4938	
	.050		3368			
	•150		2474			
	.300		3117			
	. 520		2719			
	. 753	2355	2711	4269	2967	1966
	900			- 2251		

```
CATE DI MAY 75 TABULATED SOURCE PRESSURE DATA - TATO ( ARC 11-D14 )
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ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

.520 .0394 .0045 -.0118 .0056 -.1414 .750 -.4101 -.6090 -.6358 -.6750 -.7217

-.4267 -.5921 -.5469 -.7033

(REUVO2) ( 19 OCT 74 )

PAGE 802

1.199

#### REFERENCE CATA

#### PARAMETRIC DATA

.000 1.000

8.000 ELV-08 =

SREF = 2690.0000 SQ.FT.	XMRP	=	976.0000	IN. XT					ELV-IB =
		=		IN. YT					RUCCER =
BREF = 1290.3000 IN.	ZMRP		400 .0000						GIMBAL =
	21.4	-	400, 100,000	****					
SCALE = .0200									
SECTION ( 1) VERTICAL			CEPE	ENDENT VAR	RIABLE CP				
							enn	. 0.43	025
ALPHA ( 1) = -4.176 BETA	( 1) =		000	Z/BV	-1 58	.316	.600	.840	.925
				X/CV					2070
				.000	.7273	.5969	.5712	. 5903	5672
				.025	.1892		1508		2284
				.030	.3604		1166		
				150	.2407	1291	.0682	.0699	.0251
				-300	.1053			.0094	
				- 520	0540		0710		1332
				750	3809		6815		
				.900		4161	6664	6892	6477
ALFHA ( 2) =294 BETA	( • > -	4	ms	Z/BV	.158	.316	. 600	.840	.925
WILLIA ( S) =SA4 BELV	, .	-	ickig	X/CV					
				.000	. 59(15	. 51 41)	.4737	.4195	.4075
				.025			5648		
				.050	1849		5636		
و المنا و و المستقليس و المستقليس و المنازع ال				.150					7197
				300	0746	-,2066	- 4349	4925	4816
				.520			3645		
				.750	=.4518	=. 7055	7217	7378	7864
				.900		4945	7431	7153	7134
				1344		.4545			
ALPHA ( 2) =252 BETA	(2)	= 1	.009	Z/BV	.158	.316	. ലാവ	.840	.925
				X/CV					
				.000	.6968	.5593	-5031		
				.025	1064				2346
				.050	-3131	0005	1334	1346	1632
				.150	.2064	.0956	-0311	.0378	0064
				.300	.0778	.0187	.0083	0164	0436
				. 520	~.!)799	0934	1008	0795	1611
				.750	3841	- 68174	6857	7027	-,7177
				.900					6656
ALPHA ( 2) =225 BETA	( 3)	= 4	.028	Z/BV	.158	.316	.600	.840	.925
	.,		·	X/CV					
			and the state of	.000	. 5888	.4272	.3321	363!	
				.025	. 5.137	.3793	.2642	.2600	
tige of the second seco				.050	.4942	.3578	.2836	.259	
				.1 50	.3529	.2752	.2257	.2127	
				.300	.2066	.1587	.1457	.1149	.0380



DATE OF MAY 75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 603

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

.750 -.4012 -.6997 -.7013 -.7166 -.7370

-.4363 -.6962 -.7060 -.6936

(REUVO2)

SECTION ( 1) VERTICAL DEPENDENT VARIABLE CP ALPHA ( 3) = 4.026 BETA ( 1) = .000 Z/BV .840 .925 .516 .600 X/CV .000 .6725 .4896 .4079 .4159 .4067 .025 .0647 -.0271 -.2176 -.2419 -.2583 .2559 -.0778 -.1922 -.1742 -.1896 .050 .1461 .0307 -.0392 -.0185 -.0575 150 .0078 -.0522 -.0569 -.0664 -.0944 .520 -.1474 -.1515 -.1479 -.1249 -.2047

900

CATE O1 MAY 75

#### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUVD3) ( 19 OCT 74 )

#### REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.	XMRP = 976,0000	IN. XT			5_V-18	= 8.000	5LV-08 =	4.000
LREF = 1290.3000 IN.		IN. YT			RUDDER	= .000	MACH =	1.250
BREF = 1290.3000 IN.	ZMRP = 400,0000				GIMBAL	= 1.000		
	ZPRC = SCHOOLING	1.91						
SCALE = .0200								
	Deni	DUDENT VA	RIABLE CP					
SECTION ( 1) VERTICAL	UEIT	EMPENI AN	RIADLE CF					
ALPHA ( 1) = -4.182 BETA	(1) = .003	Z/BV X/CV	.158 .3	16 .600	.840 .925			
	make the second of the second	.000	.7716 .6	546 .6095	.6187 .5166	;		
		.025		6860634	10441162			
		.050			04840536			
		.150		983 -1197				
		.300		187 .0980	.0989 .0830			
		520		144 .0259	.05500096			
		750			51425184			
		.900			57314784			
		• 5.1.1	-••	,430	13.134 14164			
ALPHA ( 2) =291 BETA	(1) = -3.997	Z/BV	.158 .3	316 .600	.840 .925			
ALT. 1 2 - 1231 DC: A		X/CV						
		.000	.6314	5681 .5365	.4835 .4830	1		
		.025			66626751			
		.050			62166613			
		.150			49785971			
		.300			32114473			
		5217			27322228			
		750			57695781			
		.900			55065602			
		• 35.7.1	•		100.0			
ALPHA ( 2) =177 BETA	(2) = .016	Z/BV	.158 .3	16 .600	.840 .925			
		X/CV						
	•	.000	.7018	5969 . 5330	.5410 .5368	)		
		.025		11811075	14901578	l		
		.050			09011069			
The second secon	remain the second second second	.150		522 .0696				
		.300			.0496 .0322			
		. 520		13230216				
		750	_		51845385			
		.900	1 .		51725068			
		• 37.77	• •	1660 - 13013	.51 (2 .5			
	4 71 - 4 074	7/01/	480 7	316 .600	.840 .925			
ALPHA ( 2) =366 BETA	- ( 5) = -4.051	Z/BV	158 3	316 · CHI	.040			
		X/CV	674.6		4707 4776	•		
		.000		1892 .4186				
the same the second second		.025		185 2951	.3143 .3462			
		-050	and the second second	4933 .3321	3193 -3016			
		.1 50	· · · · · ·	198 .2816				
		.300		2149 .2193				
		. 520	.1014 .5	1918 .0943				
		. 750	3471	1581 - 4578	48295262	<b>?</b>		

-.3591 -.4292 -.4596 -.5198



DATE OI MAY 75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 805

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUVD3)

SECTION ( 1) VERTICAL

ALPHA ( 3) =	3.843 BETA	(1) =	-003	Z/BV X/CV	.158	.316	.009	.840	.925
	ta jarahan kacamatan			.000	.7026	. 531 5	.4506	.4487	.4521
				.025	.0298	0326	1426	1780	1837
				.050	.2665	0253	1327	1311	1333
				-1 50	.2031	.0905	.0169	.0392	.0151
				.300	.0805	.0160	-0004	.0006	0131
				. 520	0749	0780	=.0699	0340	0893
				. 750	3541	5502	5292	5319	5535
				.900		3813	5240	5272	5286

4.000

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUVI)4) ( 19 OCT 74 )

.000 MACH = 1,400

FARAMETRIC DATA

1.000

8.000 ELV-CB =

#### REFERENCE DATA

SCALE = .0200

SECTION ( 1) VERTICAL

SECTION ( 1) VE	ERTICA	L			DEPENDENT VAL	RIABLE CF				
ALPHA ( 1) = -3	3.906	BETA	(1) =	.009	Z/BV	.158	.316	. 6333	.840	.925
					X/CV					
					.000	,7816	. 7269	.6589	.6808	.6626
					.025	.2252	-2579	.0149	0373	+.0534
					.050	.3147	1669	.0328	.0090	.0131
					.153	-3840	.2559	.1975	.1994	.1712
					.300	.2477	.1886	-1632	.1734	.1550
					.520	.0853	.0848	.0985	.1322	.0855
					.750	3093	3647	3428	3425	3621
					.900		3703	3426	3467	3410
ALFHA ( 2) = -	204	BETA	(-1) = -	4.000	Z/BV	.158	-316	. 600	.843	.925
					X/CV					
			* .		.000	. 6778	.6129	. 5866	- 5503	.5469
					.025	1129	0311	3258	4967	4864
					•050	1203	1392	3269	4685	5200
					.150	(195)	1470	2732	- 4025	4174
					300	.1654	0793	÷.1830	2496	3312
					, 52:1	0410	0767	1552	2921	1350
					.750	3525	4199	4154	4357	4156
					.900		4336	4255	41 71	+ . 4171
ALPHA ( 2) = -	306	BETA	(2) =	.016	Z/BV	.158	.316	. 600	840	.925
			. :		x/c/					
					.000	7.152	.6545	. 58 50	. 58 68	• 59:75
					.025	.1007		0232	0672	0822
The second	aran yayan	e and the transmission of the second		**	.050	.1826	.0970	-,0089	~.0105	0240
						.3240	,2165	.1466	.1570	.1347
					300	.2041	.1442	-1158	.1226	.1102
					. 5217	.0524	.0444	.0514	.0888	.0440
					.750	3194	3820	3631	3624	3833
				*.	.900		3915	3616	3644	3657
ALPHA ( 2) = -	.267	BETA	( 3) =	4.031	Z/BV	-1 58	.316	.600	.840	.925
					X/CV					
					.000	. 6733	. 5346	.4886	.5102	- 51 52
		1:			.025	- 5199	.4667	.3489	.3610	-3992
					-050	-5354		-38 50	.3746	.3736
					.150	.4366	.3576	-3305	.3478	.3106
					300	.3089		.2765	-2893	.2375
					• 520	.1537	-1 561	.2765 .1831	.2893 .2210	.2375 .1099



CATE DE MAY 75

## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 807

ARC11-D14TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUVO4)

SECTION ( 1) VERTICAL

ALPHA	( 3) =	4.392	BETA (	1) =	.012	Z/BV X/CV	-1 58	-316	.600	.840	.925
						.000	6605	. 5678	.4958	.4807	.4852
						.025	0212		0697		
						.090	- 2038		-,0503		
						-150	.2223	-1.534	.0883	1026	
						300	.1334	.0760	.0575	.0627	.9544
100 - 100						. 520	0073	0157	0003	.0366	0063
						750	3126	4180	3896	3837	4957
						•900		3999	3894	- 3820	- 3004

#### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL (REUM)5) ( 19 OCT 74 )

#### REFERENCE DATA

#### FARAMETRIC DATA

1.000

8.000 ELV-08 = .000 MACH =

LREF	= 13 = 13	0000,000 0005,009 0005,009	IN.	XMRP YMRP ZMRP	=	.0000	IN. XT IN. YT IN. ZT			•		ELV-IB RUDDER GIMBAL	=
SECTI	ION C	1) VERTIC	AL			DEFE	ENDENT V	ARTABLE C	F				
AL FHA	( 1)	= ->.119	BETA	(1)=	006		Z/BV X/CV	•1 58 <sub>.</sub>	.316	.000	-840	.925	
							.000	- 5258	.3831	.4242	.4586	.4075	Ę.
							.025	÷.D654			4885		
							.050	.1318			- 4063		
							-150				1984		
							- 300	1729			- 2675		
							- 520				3264		
							.750				8032		
							900				5560		
ALPHA	(-2)	=306	BETA	( 1) =	-4.000		Z/BV X/CV	-158	.316	. (009)	.840	.925	
							.000	.3897	-3203	.3218	.2675	-2433	ţ
	-	•			į.		.025				-1.0225		
							050				-1.0180		
							-150				8767		
		2000					-300				7994		
							. 520				7774		
							.750				6316		
							900				4853		
ALPHA	( 2)	264	BETA	( 2) =	-016		Z/BV X/CV	-158	-316	.009	.840	.925	,
							-000	.4817	-3117	.3309	.3787	-3536	i
							.025	1374	3047	4726	51 50	5695	
* * 1							(0.50		2934				
				. •			-150	0876	2015	2333	÷.2264	2477	
							300				2958		
							520	3786	3837	3993	3526	4474	
							. 753	5084	5248	-1.11113	5666	3935	
							.900				5114		
ALPHA	( 2) 1	348	BETA	(3) =	4.028	٠.	Z/BV X/CV	-158	316	. ୧୯୯	.840	.925	
		15					.000	.3612	1959	.1411	.1927	-1451	
							.025	.2498	.1277	.0797	.0803	.0542	
							-050	•23AB	-1083	.0945	.0572	0209	
							-1 50	.0854	.0291	.0290	0003	0957	
							.300	0009	0475	137313	1337	2268	
							- 520	2423	2473	2854	2739	4561	
							. 750	5210	5823	-1.0554	-1.0631	725a	
							.900				5758		

SATE OF MAY 75

## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 809

ARC11-014TA19 OTS+STRUT SEB-NOW MES-NOW VERTICAL

(REUVOS)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

000. = (1) ATBB 450.E = (E) AMPLA	Z/BV X/CV	-158	-316	• 600	.840	.925
	-000	.4562	.2756	.2122	-2923	.2976
	.025	1958	3473	5250	4994	5207
والمرابع السريسي سيران فالمرابع والمرابي والمرابي	-050	0277				
	-150	1188	2385	2971	2182	2413
	-300	2545	3347	3915	2896	2919
	. 520	4100	4324	4317	3483	4431
	.75.1	- 4551	6764	7199	4569	3411
	CYYN		- 5170	- 45 413	- 44.00	- 0300

34

PARAMETRIC DATA

PAGE 810

ARC11-0141A19 OTS+STRUT SRB-NON MPS-NOM VERTICAL

(REUVA)6) ( 19 OCT 74 )

#### REFERENCE DATA

SCALE = .0200

SCACE 4 JUZIN						
SECTION ( 1) VERTICAL	DEPENDENT VA	RTABLE CF	3			
ALPHA (1) = -4.074 BETA (1) = .000	2/BV X/CV	.158	.316	.600	.840	.925
	-000	7220	. 5898	.5687	. 58 69	- 5645
	.025	.1814			1889	
	.050	3583			1249	
	.150	.2387	.1269	.0656	.0681	.0249
	.300	.1929	.0459	.0425		0153
	·520		0616			
	.750		6763			_
	.900	14022			6874	
ALPHA (2) =396 BETA (1) = -4.003	Z/BV	.158	.316	.600	.840	.925
الهران المستقدين المستقدين المستقدين المستقد المستقدات ا	X/CV					
	.000	• 5923	-5146	.4767	.4216	.4117
	.025	1462	3421	5579	6847	8631
	.050	1778	3783	5580	6770	8241
	.150		3537			
	•300		2001			
	• 520		2593			
	. 75.3	57.71	7476			
	.900		6209	7354	דונור	7071
ALPHA ( 2) =408 BETA ( 2) = .009	Z/BV	-158	.316	. 600	.840	.925
	X/CV			•		
	.000	.6972	. 5614	-5342	. 5209	. 5054
	.025	-1000	0208	1651	1979	2341
	.090	.3149	.0021	1336	1258	1605
	• 1 <b>5</b> .1	.2117	.1008	.9351	.0451	0009
	•300	.0817	.0223	-0103	0139	0387
	• 529	0746	0888	0966	0756	1564
	. 750	49/15	6819	6819	6967	-,7112
	.900		5178	6644	<b>68</b> 59	6587
ALPHA ( 2) =339 BETA ( 3) = 4.028	Z/BV	.1 58	.316	. 600	-840	-925
	X/CV					21 4
	.000	. 5911	43/13	.3391	.3684	3521
	.025	. 5761	-3814	.2690	.2690	.2758
and the second of the second o	0 50	.4973	.3612	.2897	.2652	-2183
	.150	.3567	.2775	-2317	.2163	.1450
	-300	.2111	.1731	.1519	.1181	.0437
	• 520	.0429	.0092	0066	.0095	1375
	. 750	4752	6117	6396	6697	7162
	.900		4623	58 70	6434	6988





CATE OL MAY 75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 811

### ARC11-0141419 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUVI)6)

SECTION ( 1) VERTICAL	DI	EPENCENT VAR	IABLE CP				
ALTHA ( 3) = 3.984 E	SETA ( 1) = .003	Z/BV X/CV	.158	.316	. enn	.840	.925
		.000	.6739	.4994	.4080	.4304	. 41 59
		.025	.0635	0789	2149	2449	SEM
and the state of t		.050	.2541	0739	1873	1762	1898
		.1 53	.1491	.0329	0370	0161	0541
		•300	.0123	0504	0549	9631	0900
		. 520	1449	1471	1449	1207	2001
		. 750	5228	7063	6962	7111	7329
		.900		5477	6804	7314	6892

SCALE =

## ARC11-0141A19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

#### (REUVO7) ( 19 CCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

4,000 ELV-QB = 8.000 9.V-18 = SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT 1.253 .000 RUDDER = .0000 IN. YT GIMBAL = 1.009 LREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

.0200

SECT	ION (	1) VERTICA	ıL			DEFE	MCENI ANKT	ABLE CI				
		= -4.131	RETA	(1)	= .003		Z/BV	.158	.316	.009	.840	.925
ALITIA	(1)	2 -4.131	QL:A	. •.			X/CV		100		.6294	.6273
							.000	.7775	.6566	.6189		1163
							.025	.2977				0577
							.050	.3691		0454		.1082
							.150	.3269	.2031	.1279	1459	.0878
							.3/7/	.1887	.1259	.1916	.1035	0030
							.520	.0224	.0202	.0319		
							. 750	3753	500,19	4879		5799
		•					.900		-,4198	4895	4952	4710
												005
		=300	DETA	(4)	= -4.000		Z/BV	.158	.316	. 600	.840	.925
AL PH	r ( S)	) =5tm	DEIR				XVCA					40.67
							.000	.6392	.5738	. 5451	.5716	.4957
							.025	1014	2343	4155	6531	6614
							.050	1182	, -	4146	0178	6509
							.153	1100	2256	3841	4971	5836
	* ***						.300	.0675	1273	2947	3/168	4437
							,520	1315	1577	2420	2531	2073
							.750	4331	5619	5350	-,5663	5669
						- 1	.900		4853	5570	5408	5486
					= .012		Z/BV	.158	.316	. 600	.843	.925
ALPH	A CZ	) =41	1 BET	( 5)	- 1016		X/CV					
							.000	.7110	. R134	. 5475	. 5493	.5473
							.025	1258	.0365	11899	1296	1422
							.050	.2949	.0621	-,0771	0755	(18:17
							.153	.2728	.1653	.0852	.0987	.0709
							.300	.1564	.0821	.0569	.0613	.0440
							. 52!)	0107		0099	.0209	0394
								3812			5023	5232
							. 753	-,3012	4428			4907
							.990		-,4420			
									***	. enn	.840	.925
A. C	HÀ C	9) =43	BET	A. (3	) = 4.031	Ļ	Z/BV	. 1 58	.316	. 66101	10.42	
~			1				XVCA			4001	. 4513	4474
							.000	. 6356				
							.025	. 5083				
							.050	.5126				·
							,150	.4002	.3222			
			4 B				.300	.2603				
							.529	.0981	.096	.099		
							750	389	1		64781	
							.900		÷.,401		9 -,4653	35162
							• 3.1.1		111			

DATE OIL MAY 75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 813

## ARC11-0141419 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUVITT)

SECTION ( 1) VERTICAL

ALPHA ( 3) = 3.582 BETA ( 1) = .003	Z/BV X/CV	1 58	.316	.600	.849	.925
	.000	7005	. 5337	.4590	.4565	.4611
	.025	.0377	0210	1379	1666	1768
	.050				1189	
	-150	.2056	.0965	.0281	.0485	.0311
	.300	.0875	.0245	.0057	.0086	0061
	. 529	0684	0722	0629	0296	0839
	. 753	3977	5439	5228	5273	5489
	.900		4417	5186	5233	5247

## ARC11-0141A19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUVDR) ( 19 OCT 74 )

	en e			**				PARAMETRI	C DATA	
REFERENCE DAT							1.V-1B =	8.000	ELV-CB =	4.000
SREF = 2690.0000 50.FT.	XMRF = 976.000	O IN. XT				_	UDDER =	.000	часн =	1.400
LREF = 1290.3000 IN.	YMRF = .000	g IN. YI					SIMBAL =	1.000		
BREF = 1290.3000 IN.	ZMRP = 400.000	g tN. ZT					MINDRC -			
SCALE = .0200										
SECTION ( 1) VERTICAL	♥ DE	PENDENT VAR	IABLE CF					•		
ALPHA ( 1) = -4.017 BETA	(1) = 4.006	Z/2V	.158	.316	.exs	.840	.925		•	
WITHW ( 1) = -4:011 DEIN		X/CV								
		.000	.7846	.7123	.6576	.6567	.6673			
		.925	.2200	.1479	.0165	0722	0455			
A Company of the Comp		.050	.2946	.1656	.0264	.0180	.0067			
		.150	3846	.2589	.1952	.2025	.1697			
		.300	.2579	.1872	.1612	.1703	1528			
		520	.0906	.0868	.1008	.1323	.0862			
			2885	3645	3436	3444	3646			
		.750				3496	3425			
		,900		-13046	10-12-0					
				.316	, ext	.840	.925			
ALPHA ( 2) =486 BETA	(1) = -4.000	Z/BV	.158	.310	2 /6/61	••				
		X/CV			5017	.55R1	.5457			
		execu-	. 6764	. R174	.5907					
		.025		1256	3257	4505	5214			
		.090	1173	1413	3249	~,4500	4192			
	and the second second	.150	0858	1419	2724	4022				
		.300	.1625	0764	1782	- 2517	3333			
		. 520	0406	0762	1520	1454	1310			
		. 750	3426	4214	41 40	4388	4174			
		.900		4239	4254	4209	4153			
a an an an an an an an an an a <u>a.</u> .		2/87	.159	316	. 600	.840	.025			
ALPHA ( 2) 8438 BETA	(.5) = .016	X/CV								
· · · · · · · · · · · · · · · · · · ·		000	.7050	.6553	.5874	. 5885	.5927	•		
		.025				~.0803	0685			
		_	2056			0089	+.0051			
		.050			.1510	.1639				
The second secon		.150			_	.1289				
		.300			22					
		. 520					3852			
		. 753					3699			
		.900		3884	3627	3554	-19033			
			1				005			
ALPHA ( 2) =456 BETA	A (3) = 4.020	Z/BV	.1 58	.316	ens.	.840	.925			
ALITA I EL E 430 DELL	<u> </u>	X/CV								
		.000	. 6687							
		.025	.51.45	.4583						
		.050		.4364	.3760	.3719				
		.150			.3273	.3392				
		.300				.283	.2340	i		
		52!		155	.1778	.2156				
					316		3692	2		
		. 75.			5 - 3020		3699	<b>)</b>		

-.3246 -.3020 -.3219 -.3699

#### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUVIA)

SECTION ( 1) VERTICAL

ALPHA (3) = 4.014 BETA (1) = .009	Z/BV X/CV	-158	-316	. 600	.840	.925	
	-000	. 661 5	.5607	.4912	.4821	.4869	
	.025	+.0270	.0221	0770	1147	1263	
	.050	-2036	.0230	0596	~.0658	0678	
	•150	-2190	-1496	.0818	.0990	.0939	
	•300	-1328	.9765	.0544	.0588	.0486	
	-520	0093	0151	0011	.0328	0087	
	. 753	3059	4227	3946	3903	4104	
	.900		3924	3944	3882	- 4035	

#### ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM VERTICAL

(REUVID9). ( 19 CCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

LREF =	2690,0000 SQ.FT. 1290,3000 IN. 1290,3000 IN.	XMRP = YMRP = ZMRP =	976.0000 IN. X .0000 IN. Y 400.0000 IN. Z	r			ELV-IB = RUDDER = GIMBAL =	8.000 .000 1.000	WYCH =	4.000 .900
SECTIO	N ( 1) VERTICAL		CEPENCENT	VARIABLE CP						
ALPHA (	1) = -4.191 BETA	(1) =	.000 Z/BV	1 58	.316 .6	.840 <b>.</b> 840	.925			

ALPHA ( 1) = -4.191	BETA	(.1)	=	.000	Z/BV	1 58	.316	. ୧୯୯୦	-840	.925	
					X/CV	F4 40	700	44.60	.4578	.4955	
					.000	- 51 40	.3863	.4169		5811	
					.025		2241				
					.050	.1145		3799		4878	
					.153	0381			21117	2254	
					-300		1996			2935	
					.520	3262	3628			4394	
					.750	5429		-1.1382		4498	
					.900		5423	5703	5294	4454	
ALPHA ( 2) =438	BETA	(1)	= -	-4.000	Z/BV	.158	.316	. കോ	.840	.925	
					X/CV						
					.000	.3817	.3250	. 31 70	.2585	.2222	
					.025	4614	5987	9103	-1.0620	-1.2822	
					.050	5349	7449	9061	-1.0598	-1.2775	
					.150		6086	8834	9080	-1.0195	
					300				8192		
			•		. 520	5469			7875		
					.750	- 5888			6134		
					900				4724		
ALPHA ( 2) =525	BETA	( 5)	=	003	Z/BV	.158	.316	.00	.840	.925	
					X/CV						
					.000	. 4834	-31 51	.3394		.3699	
					.025	1250	2657	4685	4992	5408	
					.050	.0741	2748	4121	4127	4662	
					1 50	0801	1841	2313	2056	2266	
					.300	2247	2673	2476	2719	2877	
					• 520	3658	3849	3876	3256	4339	
					753	5130	6586	-1.1140	4613	3387	
					.900		5473	53.69	3784	2984	
ALFHA ( 2) =441	BETA	/ 33	-	4.025	2/8V	. 1 58	.316	. 600	.840	.925	
ALIMA ( 2) =441	DEIA	,	-	41023	x/cv						
					.000	.3735	.2181	.1375	.1983	.1562	
					.025	.2663	.1618	.0861	.0968	.0856	
					.050	.2590	.1455	.0962		.0123	
							.0520	.0321			
				+ _	-150	.1086	_				
					.300	0347	0415	0681	1153		
					• 52!)	2:176	2431		2455		
					. 750	5080	-	-1.0391			
					.91313		- 51 61	701911	6317	5059	



DATE OF MAY 75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 817

#### ARC11-0141419 OTS+STRUT SRB-LOW MPS-NOW VERTICAL

(REUVI)9)

c	50	TI	On I	• 3	VER	T 1	C 41	1
Э	Ľ				A CLK			L

#### DEPENDENT VARIABLE CP

ALFHA ( 3) = 4.050 BETA ( 1) = .006	Z/BV	.1 58	-316	. 200	.840	.925
	X/CV					
	.000	• 4605	.2819	.2188	.3297	3076
	.025	1913	3257	5176	4749	5198
	.050	.0063	25£0	4678	3750	4391
	.150	1072	2367	2919	2098	2382
	- 300	2467	3322	2996	2776	2955
	. 5217	4059	4383	3841	3364	4478
	. 750	4655	6332	7842	4498	2963
	.900		5052	4292	3713	2575

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.

#### ARC11-0141A19 OTS+STRUT SRB-LOW MPS-NOM VERTICAL

(REUVID) ( 19 OCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

LREF	= 2690.0000 = 1290.3000 = 1290.3000	IN.	KMRP = (MRP = (MRP =	976.0000 .0000 400.0000	IN. YT					ELV-1B = RUDDER = GIMBAL =	•	8.000 .000 1.000	ELV-CB MACH		4.009 1.109
SCALE	= .0200														
SECTI	ION ( 1) VERTI	CAL		DEPE	NDENT VA	RIABLE CP									
									0.45	005					
ALPHA	(1) = -3.97	B BETA (	1) = -	.006	Z/BV X/CV	.1 58	.316	. 600	.840	.925					
					000	.7260	.5911	.5674	. 5928	. 5641					
					.025	.1853		1470							
			•		.050	.3649	.0342	1116							
					.150	.2421	.1313	.0650	.0677						
					.300	1064	.0483	.0443		0142					
					. 520	0520	0601			1319					
					. 750		6738					•			
					.900			6624							
					1 300			, oct							
AL PHA	(2) =38	7 BETA (	1) = -4	.003	Z/BV	.1 58	.316	.609	840	.925				*	
ACTION	1 27 2 -150	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*/ - 4	***************************************	X/CV	- 2 00									
					.000	.5923	. 51 43	.4780	.4281	. 4139					
					.025		3214		6838	8635					
					.050		3819								
					.150		3466								
					300		2062								
					.520		2594								
					. 750		7491								
					.900			7365							
								•							
ALPHA	(2) =42	9 BETA (	5) =	.009	Z/BV X/CV	.158	.316	.600	.840	.925					
		· .			.000	.6972	. 5622	.5724	.5261	. 5.132					
					.025	.1082		1591	2016	23/38					
					(15)	.3153		1366							
					150	.2125	1012	.0334		-,0010					
					300	.0856	.0206			0375					
					520	0744		0965							
	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				750		6779								
					.900	- 14303				6575	•				
					1 300		• 55.41	.0022							
ALPHA	(2) =38	4 BETA (	3) = 4	.028	Z/BV X/CV	-158	.316	. 600	.840	.925					
					.000	. 58 59	.4271	.3363	.3830	.3574					
					.025	5027	.3793	.2683	.2670	.2765					
					.0.50	4945	.3573	.2875	.2610						
					.150	.3541	.2748	.2277	2167						
					* 1 J/1	10011	1 E 7 40		4470	17447					

. 520

. 750

.900

.0094 -.1377

-.4849 -.6112 -.6393 -.6697 -.7148

-.4638 -.5861 -.6425 -.5979



OF POOR QUALITY

FAGE 819

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

#### ARC11-0141A19 OTS+STRUT SRB-LOW MPS-NOM VERTICAL

(REUVIO)

SECTION ( 1) VERTICAL

ALPHA ( 3) = 3	3.930 BETA	(1) = .000	Z/BV X/CV	.1 58	.316	. 600	.840	.925
			.000	6723	.4885	.4111	. 4310	41 58
			.025	.0636	0780	2174	2423	258 <u>9</u>
			.050	2536	0741	1924	1764	1851
			.150	.1489	.0318	0378	0155	0521
			.309	.0101	0493	0559	0623	0898
			.520	1471	1492	1450	1203	2013
			.75.1	- 5329	7082	6975	-,7123	7337
			, cirro		5567	6811	7022	6903

#### ARC11-0141A19 OTS+STRUT SRB-LOW MPS-NOM VERTICAL

(REUV11) ( 19 OCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

SREF = 2690,0000 SQ.FT. XM	RP = 976.0000	IN. XT					ELV-IB =	8.000	ELV-C8 = 4.000
LREF = 1290.3000 IN. YM		IN. YT					RUDDER =	.000	MACH = 1.253
	RP = 400.0000						GIMBAL =	1.000	
SCALE = .0200									
• 11 1									
SECTION ( 1) VERTICAL	DEPE	ENDENT VA	RIABLE CP					,	
ALPHA ( 1) = -4.746 BETA ( 1	) = .006	Z/BV X/CV	.159	.316	-600	.840	.925		
		.000	.7812	6608	.6197	6312	6275		
		.025	-2169	.0774	0578	0972	1109		
		.050	.3740		0491		0511		
		.150	3307	2071	1282	.1491	-1101		
		300	.1915	.1231	.1046	1063			
		.520	,0228	.0187	.0315		0054		
		. 750	3848	5073			5155		
		.900	*5040	4244		5020			
		19.7.1		4644	-,4661	5.721	4134		_
ALPHA ( 2) =444 BETA ( 1	) = -4.000	Z/BV	.158	.316	.900	.840	.925		ORIGINAL PAGE IS OF POOR QUALITY
		X/CV							
		.000	6369	. 5716	5399	4885			35
		.025					6723		82
		.050			4254				$\widetilde{\mathcal{R}}$ $\widetilde{\mathcal{A}}$
		1 50	1138		3925				£ 1
the control of the co		•300			-,3017				# F
		52!1	1363		2492				<b>Z Z</b>
		. 750	4398	- 5706	5447	5754	5756		
		.900		4922	5671	5498	- 5576		
ALFHA (2) =402 BETA (2	) = .012	Z/BV	-158	.316	. eoo	.840	.925		<b>15</b> 55
ACTION TEXT - TABLE DETA TE	,0.12	X/CV	•1.30	.510	• (0.2)	10.42	.525		
		,000	7067	. 0009	-5340	5425	.5373		
		.025	1181	.0299	1005	1351			
		.050	,2875	.0540	0798		0924		
		.150	2671	.1586	.0740	.0929			
		300		.0741	.0478	.0529			
		520	.1468 0193		0187		0490		
		.753	3977		5117				
		-900		4654	5.761	51 69	- 5.165		
ALPHA ( 2) =324 BETA ( 3	0 = 4.034	Z/BV X/CV	.1 58	.316	.600	.840	.925		
		.000	. 6359	. 49 53	4236	.4443	.4436		
		.025	5113	.4275	-3023	.3185	-3529		
		.050	.5267	.4067	.3347	.3239	-3953		
		.150	.4957	.3232	.2872	.2910	.2405		
		.300	2690	.2212	-2236	.2170	.1534		
		. 520	1959	.0957	.0985		0031		
		750	3991		45RI				
		,900			4274				



DATE DI MAY 75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 821

#### ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM VERTICAL

(REUV11)

SEC	Ţ	ΙĊ	Ν.	ŧ	1)	VERT	ICAL

ALFHA ( 3) = 3.552 BETA ( 1) =	.003	Z/BV X/CV	.1 58	-316	. 600	.840	.925
		.000	7.129	.5346	.4559	.4548	.4600
		.025	.0385	0184	1300	1628	1754
		.090	.2750	0059	1117	1082	1110
		-150	.2071	.0995	.0271	.0499	.0310
		•300	.0853	.0236	.0077	.0095	0062
		. 520	0675	0738	0632	0254	0860
		751	- 4063	5488	5278	5298	5519
		900		4593	5225	5260	5274

#### ARC11-014TA19 OTS+STRUT SRB-LCW MFS-NOM VERTICAL

(REUV12) ( 19 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

4.000 ELV-IB = 8.000 ETA-CB = SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT 1.400 .000 MACH = RUDDER = .0000 IN. YT LREF = 1290.3000 IN. YMRP = 1.000 GIMBAL = ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

.0200

SCALE =

SECTION ( 1) VERTICAL	DEPENDENT VAR	TABLE CP					
ALPHA ( 1) = -4.122 BETA ( 1) = .000	Z/BV X/CV	.158	.316	•600	.849	.925	
	.000	. 7829	.7188	.6623	.6667	.6701	
	.025	.5555	.1 5.19	.0137	0352	0485	
	•050	-3100	.1661	.0272	.0147	.0034	
	.150	3883	.2592	.1947	.2030	.1649	
	•300	.2486	.1900	.1630	.1716	.1533	
	. 52!)	.0903	.0887	.0998	.1323	.0847	
	. 750		3676	3454	3481	3679	
	.900		3715	3443	3526	3461	-
ALPHA ( 2) =396 BETA ( 1) = -4.003	Z/BV	-1 58	316	.609	.840	.925	
	x/cv					E400	
	.000	.6754	.6114	.5892	. 5539	.5489	
	.025	1154	11//	~.3233	4971	- 5107	
	.050	1206	1360	3243	4681	- 4174	
	150	0945	1424	- 4040	4017 2506	- 3307	
	.300				1493		
	. 520				4381		
	.751	3616	4182		4169		
	.900		-,4400	4246	4109	-,4104	
ALPHA (2) =378 BETA (2) = .006	Z/BV X/CV	.158	.31€	. eno	.840	.925	
	.000	.7075	.6647	5890	. 5901	. 5957	
	.025	.1225	.1934	0162	11656	0752	
	.050	.1995	.1059	0073	0157	0229	
	.150	.3290	.2204	.1539	.1596	.1371	
	.300	.2074	.1467	1190	.1297	.1125	
	. 520	.0562	.0479	.0587	.0938	.0472	
	.750	3318	÷.3827	3641	3625	3846	
	.900		3942	3628	3637	3670	
ALPHA (2) =315 BETA (3) = 4.025	Z/BV X/CV	.1 58	.316	. 600	.840	.925	
	.000	. 6740	. 5394	.4871	. 5080	.5167	
	.025	. 5249	.4674	.3496	.3602	.3975	
	.050	. 5359	.4440	.3830	.3755	.3732	
	-1 507	.4349	.3683	.3343	.3447	-3091	
	300	.3091	.2635	.2762	.2864	.2394	
	.520	.1568	1 589	.1825	.2201	.1086	
	, 750	3229	3288	3107		3627	
	.900			2978		3641	



PAGE 823

## ARC11-0141A19 OTS+STRUT SRB-LOW MFS-NOW VERTICAL

(REUV12)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CF

ALPHA (3) = 4.005 BETA (1) =	.000	Z/BV X/CV	. 1 58	.316	.609	.849	.925
		.000	. 6670	.5696	.4985	.4835	4905
		.025	0307	.0234	0657	1123	1173
		.050	.21149	.0213	0560	0605	0674
		.150	.2186	.1 490	.0870	.0981	.0954
		300	.1311	.0779	.0564	.0582	.0492
		. 520	0092		0041		
		.750	3266	4242	3973	3913	4139
		.900		4155	3972	3925	406

ORIGINAL PAGE IN OF POOR QUALITY

ARC11-0141A19 OTS+STRUT SRB-NOM MPS-OFF VERTICAL

(REUV13) ( 19 OCT 74 )

#### REFERENCE DATA

PARAMETRIC DATA

!	LREF	= 1 = 1	0000.000 0008.009 0008.009	IN.	XMRP YMRP ZMRP	=		.0000	IN. XT IN. YT IN. ZT					ELV-IB = RUDDER = GIMBAL =	0	000	ELV-CB	4.000 .900
	SECTI	ion (	1) VERTIC	CAL				DEP	ENDENT V	ARIABLE CP								
	ALPHA	(-1)	= -4.119	9 BETA	(1)	= -	.003		Z/BV X/CV	.1 58	.316	. 600	.840	.925				
									.000	.5157	.3721	.4327	.4741	.4187				
									.025					5436				
									.050					4655				
									150			1594						
									.300					2536				
								*	520					3993				
									.750					- 2657				
									900					2015				
	ALPHA	( 2)	=39	D BETA	(1)	= -3	.997		Z/BV X/CV	.158	.316	.exo	.849	.925				
									.000	3781	3084	.3222	.2585	.2283				
									.025				9905	-1.1445	•			
									.050	-,5139	7425	9072	9873	-1.1182				
									1 50					-1.1017				
					_				300					8788				
					-				- 520					4800				
									. 750					2520				
									.900		3138	2610	2544	1.765				
	ALPHA	( 2)	=37	B BETA	( 2)	= ,	.016		Z/BV X/CV	.158	.316	•600	.840	.925				
									.000			.3466						
			• *		, .				.025	1283	2520	4418	4489	4926				
									.057	.0762	2665	3929	3445	- 4023				
									.153	0797	1821	1907	1613	1822				
									.300	2240	2542	- 2029	2221	2426				
									. 529	3229	3137	3111	2873	3959				
									. 753	2668	3464	4399	3433	2495				
				,		•			.900					1634				
	ALPHA	( 2)	=32	7 BETA	(. 3)	= 4	.028		Z/BV X/CV	-158	.316	.600	.840	.925				
									.000	-3580	.1926	.1381	.1922	.1381				
									.025		.1436							
									.050		1232	-						
									.1 53		.0477			0629				
									.300	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		_		1945				
									520					4182				
									. 2611	- • 50133	- 12511							

.750 -.3077 -.2840 -.4668 -.7642 -.6628

-.2335 -.2024 -.4433 -.3830



DATE OI MAY 75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 825

#### ARC11-0141A19 OTS+STRUT SRB-NOM MES-OFF VERTICAL

-.2461 -.2345 -.3121 -.1681

(REUV13)

SECTION ( 1)	VERTICA	L									
ALPHA ( 3) ±	3.909	BETA	( 1	) =	.000	Z/BV X/CV	.158	316	. 600	.840	.925
						.000	3406	.2527	-3209	-3689	.3143
						.025	1660	3409	4152	4177	4838
						.093	0455	~.2392	3444	3082	3916
						1 53	1256	2487	1705	1685	2059
						-300	262!)	2640	1801	2392	2748
		٠.				- 520	3577	2983	3259	3103	~.4380
						.750	2705	2796	4809	3432	2469

# ARC11-D141A19 OTS+STRUT SRB-NOM MFS-OFF VERTICAL (REUV14) ( 19 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

				.0000 \$		XMRP YMRP		76.0000 ממנים	IN. XT					ELV-IB = RUDDER =	000.8 000.	ELV-CB MACH	=	1.10
		=	1290	.3000 1		ZMRP		.0000 0000-000						GIMBAL =	1.000			
	SECTI	CN	(1)	VERTICA	AL .			DEP	ENDENT V	ARIABLE C	•							
	ALPHA	( 1	) =	-5.142	BETA	(1)	=00	16	7/BV	. 1 58	.316	.600	.840	.925				
								-	X/CV									
									.000	.7324	.6053	. 5817	. 6093	.5784				
									.025	.1934	.1060	1441	1886	2322				
									.050	.3701	-0371	1179	1167	1623				
									.150	.2450	.1315	.0699	.0688	.0289				
									.300	.1082	.0528	.0471	.0076	0124				
									• 520	0494	0588	0700	~.0479	1313				
									.750	3597	6721	6853	7037	7111				
									.900		3953	6713	6944	- 6487			OF OF	Ta Ta
	ALPHA	( 2	) =	321	BETA	(1)	= -4.00	13	Z/BV X/CV	-158	-316	•600	.840	.925			OF POOR QUALITY	
	•								.000	59/14	-5172	.4766	.4272	4090				>
									.025	1511		5648	6908	8691			~ [	-
•									.050	1830				8292			ည္ ,	ਚ
									.150		3611			7051			Ξ:	Š
									.300	0718	2079	4369	4936	4846				<del>.</del> .
									. 520	2566	2649	3619	4696	3922			15	<b>E</b>
									.750	4210	6374	7204	7383	7866			<b>12</b> 1	F6
				• • •					.900		4684	7406	7134	7137			# <b>1</b>	Ų2
	ALPHA	( 2	) . =	432	BETA	( 2)	= .01	16	Z/BV X/CV	1 58	.316	.600	-840	925				
									.000	-6992	. 5581	.5385	. 5279	.0142				
									.025	.1002	.0065	1817	2097	2457				
									.050	-3105		1560						
									.150	.2060	.0951	.0282	.0355	0110				
									•300	.0786	-0153	.0055	0219	0447				
									. 52:1	0815	0928	1022	0840	1610				
									.750	3552	- 6650	- 6845	7024	7165				
									•900		3928	6684	6924	- 6633				
	ALPHA	( 2	) 2	396	BETA	( 3)	= 4.02	25	Z/BV	-1 58	.316	•600	.840	925		,		
									X/CV		.00		205					
									.000	. 5899	.4281	.3367	.3821	.35)7				
									.025	5319	-3822	.2611	-2616		* .			
									.050	4952	-3548	.2828	.2676					
									150	-3540	.2739	.5560	-2135					
									300	.2054	.1714	.1463	.1143					
									- 520	.0393		0116		1426				
									. 750	3879	6137	6373	- 6759	7215				

-.4069 -.5914 -.6482 -.7038



CATE OI MAY 75

# TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

FAGE 827

### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF VERTICAL

(REUVI 4)

SECTION ( 1) VERTICAL

ALPHA ( 3) = 3.864 BETA ( 1) = .	.003 Z/BV X/CV	-1 58	-316	- 600	.840	.925
	.000	6728	4900	40 58	.4277	.4097
	.025	.0635	0599	2178	2407	2012
	•050	.2558	0771	1972	1791	1887
	.150	.1487	.0304	0396	0214	0545
	.300	.0092	0514	0575	0658	0924
	. 520	1465	1 502	1480	1236	2032
	. 75.1	3723	6628	6986	7142	7352
	רורוס		4067	- 6820	- 7037	- R0/16

# ARC11-014TA19 OTS+STRUT SRB-NON MES-OFF VERTICAL

(REUV15) ( 19 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = LREF = 1290.3000 IN. YMRP = BREF = 1290.3000 IN. ZMRP = SCALE = .0200	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT		ELV-IB = RUCCER = GIMBAL =	8.000 ELV-CB = 4.000 .000 MACH = 1.250 1.000
SECTION ( 1) VERTICAL	DEPENDENT VARIABLE	CP		
ALPHA ( 1) = -4.113 BETA ( 1) =	.003 2/BV .158 X/CV	.316 .600	.840 .925	
	.000 .778	1 .6567 .6233	.6314 .6275	
	.025 .210		09651158	•
	.050 .371			
	.153 .328			
	.300 .191			
	.520 .026			
		549414807		
	.900	31184739		
ALPHA ( 2) =390 BETA ( 1) = -4	.000 Z/BV .156 X/CV	.316 .600	.840 .925	
	.000 .638	0 .5722 .5437	.4975 .4935	
		622494193	65406611	
		624664188		
		422613870		
	.300 .066	512822941	30594485	
		515682425		
	.750325	654735372	56725690	
	.900	36295591	54215512	
ALPHA (2) = -,363 BETA (2) =	.012 Z/BV .156 X/CV	.316 · RW	.849 .925	
	.000 -715	7 .6106 .5463	.5514 .5480	
	.025 .124	4 .03990894	12771465	
	.050 .292	9 .06110775	07700846	
	.153 .276	8 .1661 .0832	.1000 -0734	
	•300 •152	3 .0807 .0578	.0638 .0439	
	.520020	101990092	.02090388	
	.750283	251074956	53125216	
	.900	31934896	- 5009 - 4907	
ALPHA (2) =294 BETA (3) = 4	.028 Z/3V .156 X/CV	.316 .600	.840 .925	
	.000 .634	6 -4969 -4301	.4528 .4478	
	.025 .501	4 .4195 .2998	.3141 .3462	
	.050 .517	8 .4017 .3343	.3209 .3017	
	.150 .398	2872 .3170	.2908 .2384	
	.300 .266		.2178 .1523	
	.520 .099		. 1391 10913	
	.750288	344914500	47375168	_
	.900	30034233	4603 5195	•

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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 829

### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF VERTICAL

(REUV15)

SECTION ( 1) VERTIC	CAL	
---------------------	-----	--

### DEPENDENT VARIABLE CP

ALPHA ( 3)	=	3.834	BETA (	1) =	.012	Z/BV	-1.58	.316	. 600	.840	.925
						X/CV					
						.000	7038	5353	.4568	.4546	4583
						.025	.0454	0123	1262	1676	1730
						-050	.2736	0070	1176	1100	1104
						-1 59	2068	.0988	.0290	.0516	-0316
						•300	.0880	.0235	.0086	.0111	0032
						. 520	~.0628	0697	0605	0279	0848
						.753	2944	5391	5295	5256	5474
						900		3253	5152	5215	5229

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### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF VERTICAL

(REUV16) ( 19 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

SREF		2690.0000 SQ.FT.	XMRP	ŧ	976.0000 IN. XT	ELY-IB =	8.000	ELV-CB =	4.000
FEE	2	1290.3000 IN.	YMRP	#	.0000 IN. YT	RUDDER =	.000	MACH =	1.400
BREF	2	1290.3000 IN.	ZMRP	=	400.0000 IN. ZT	GINBAL =	1,000		
SCALE	I	•0500							

SECTION ( 1) VERTICAL		DEPENDENT V	ARIABLE C	P		• ,	
ALPHA ( 1) = -4.095 BETA	(1) = .012	Z/BV Y/CV	.158	-316	.600	.849	.925
		.000	. 7816	.7183	-6561	. 6560	.5669
		-025	.2270				0486
		.950	3149				
	Annual Control	•150	.3874				
		•300	2520				1 549
		520	.0913				.0859
••		. 750	2345	3667			3661
		•900				3501	
ALFHA ( 2) =393 BETA	(1) = -4.000	Z/BV X/CV	.158	,316	.600	.840	.925
		+000	6790	.6123	- 5994	.5523	.5482
		.025	1128	0950	3212	4981	4846
		.050	1196	1366	3227	4681	5188
		-157	0966	1420	2741	4007	4145
		.300	.1557	0833	1829	2469	3313
		. 529	0411	0773	1508	1466	1391
		. 750	2744	4175	4143	4368	4160
		•900		3104	4240	-,4156	4151
ALPHA ( 2) =291 BETA	(2) =003	Z/BV X/CV	-1 58	.316	.609	.840	.925
		-000	. 7,173	.6588	. 5877	5876	.5937
		.025	1228	.1091	0172	0642	0712
		.050	.1952	.1028	0077	0090	0218
		150	.3245	-2157	.1462	-1585	1374
		•300	.21741	.1457	-1179	.1267	.1119
		• 520	.0524	.0454	.0562	.0920	.0458
		. 751	2444	3836	3637	3635	3852
		•900				3637	
LPHA ( 2) =318 BETA	(3) = 4.025	Z/BV X/CV	-1 58	.316	. 600	.840	.925
		.000	6742	- 5352	.4889	.5386	-5138
		.025	- 5190	4652	.3465	.3607	.3963
		.050	- 5351	.4415	3825	.3743	.3713
		. 1 50	.4331	.3697	.3327	3454	3087
		• 300	.3141	.2652	.2771	.2879	2385
		. 520	.1496	1 58 4	1807	2193	1978
		. 750		- 3289			3647
		.900				3187	
					· · · · · · · · · · · · · · · · · · ·	• • • • •	

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TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

### ARC11-0141A19 OTS+STRUT SRB-NOM MPS-OFF VERTICAL

(REUV16)

SECTION ( 1) VERTICAL

DEFENDENT VARIABLE CP

ALFHA	(	3)	=	3.861	BETA	(1)	=	006	Z/BV X/CV	1 58	.316	. 600	.849	.925
									1,000	.6709	. 5749	. 5022	.4893	.4943
									.025	0190	.0455	~.0693	1073	1186
									.090	-2038	.0299	0548	~.0562	0645
									150	.2214	.1567	.0894	-1041	.0989
									•300	1354	.0787	.0610	.0660	.0598
									- 520	0034	-,0114	.0009	.0375	- (1) 48
									. 750	2371	4181	3906	3854	4957
									.900		2807	3894	3839	3984

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# ARC11-D14IA19 OTS+STRUT SRB-HI MFS-HI VERTICAL (REUV17) ( 19 CCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

											+							
	SRFF	±	2690	กกกก	SQ.FT	. XMR	P =	976	0000	IN. XT					ELV-IB =	000.8	ELV-OB =	4.6
	LREF						P =	7		IN. YT					RUDDER =	.000	MACH =	
	BREF						P =	Ai V		IN. ZT					GIMBAL =	1.000		
	SCALE		LESG	.0200	• • • • • • • • • • • • • • • • • • • •			4010	, , , , , , , , , , , ,									
	SCHEE	_		·ucuti														
	SECT	TON	cii	VERTIC	*A1				CFPI	ENDENT VA	ARIABLE CP	1						
	ALPHA	( 1	) =	-4.15	5 BET	A (1)	=	.009		Z/BV	.158	.316	. 600	.840	.925			
										X/CV								
										.000	.5325	.3935	.4217	. 4682	.4142			
									. •	.025	0539	1974	4185	4788	5430			
										.050	.1425	2034	3552	- 3888	4582			
					•					.150				1870				
										-300					2657			
										520				3108			•	
										750				5625				
										900				5105				
						•												
	ALPHA	( :	2) =	42	BET	A (1)	= -4	.003		Z/BV	.158	.316	.000	.840	.925			
			-							X/CV								
										.000	.3766	.3147	.3127	.2520	.2190			
										.025				-1.0740	-1.2988			
										.050				-1.0692				
•										150				9179				
										300				8369				
										. 520				8052				
										750				6534				
					•					.900	00731			5056				
										. 5000		10170	1000	, 50, 50				
	AI PHA	. ( :	?) =	44	7 BET	A (2)	=	.009		Z/BV	.158	-316	. enn	-840	.925			
			-							X/CV							•	
										.000	4938	.3455	.3234	.3771	.3900			
										.025		2713	4633	5389	5566			
										.050				4384				
										.150				2234				
										300				2994				
										520				3432				
										750				5444				
										.900				4878				
				1						• • • • • • • • • • • • • • • • • • • •		131-10						
	AL PHA	( 2	) <u>=</u>	43	S BET	(E). A	= 4	028		Z/BV	.158	.316	. 600	.840	.925			
		•								X/CV								
										.000	.3884	-2358	.1444	.2193	.1710			
				100						.025	.2863	.1733		.0925				
										.050	.2741	.1508	.0856					
										° .1 53	1190	.0729	.0287					
						•				300	0190	*	0671	1120				
										. 520	1816			2353	_			
										.750				-1.0388				
							4			.900	-, 4 (00)			6476				
										•900		5559	8977	-,0416	4009			



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# TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

PAGE 833

ARC11-D14IA19 OTS+STRUT SRB-HI MFS-HI VERTICAL

(REUV17)

SECTION ( 1) VERTICAL

	and the second second					
ALPHA (3) = 3.930 BETA (1) = .000	Z/BV X/CV	.1 59	-316	• 600	.840	.925
	.000			-2537		
	.025	2313	3623	5374	5286	5706
	.050	0153	3643	4847	4512	4846
	-150	1556	2780	3013	2322	2734
	300	3126	3161	3168	2961	3279
	• 52!7	4644	4459	3953	3786	4818
	. 750	5419	5629	8448	4935	3609
	•900		475 <u>1</u>	4894	4321	3124

# ARC11-014TA19 OTS+STRUT SRB-HT MES-HT VERTICAL

(REUV18) ( 19 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

ELV-CB = 4,000 8.000 ELV-IB = 976.0000 IN. XT SREF = 2690.0000 SQ.FT. 1,100 RUDDER = .000 MACH .0000 IN. YT LREF = 1290.3000 IN. 1.000 GIMBAL = 400.0000 IN. ZT ZMRP = BREF = 1290.3000 IN.

SCALE = .0200

### DECEMBERT VARIABLE CR

SECTION ( 1) VERTICAL	DEPENDENT VAR	IABLE CP				• • •
ALPHA ( 1) = -4.098 BETA ( 1) = .000	Z/BV X/CV	.158	.316	.010	.840	.925
	.000	.7290	.5927	5720	. 5893	.5684
	.025	1852		1530	1889	2382
	.050	3668	.0359	1231	1290	1645
	.153	.2397	.1297	.0656	.0683	.0258
	.300	1070	.0466	.0435	0067	0148
	520	0538	0606	0728	(7575	1339
	. 793	4292	6782	6826	7013	7089
	.900		4664	6671	6912	6485
ALPHA ( 2) =396 BETA ( 1) = -4:003	Z/BV X/CV	. 1 58	316	.000	.840	.925
	.000	- 5933	. 51 55	.4822	.4267	.4131
	.025	1459	3549	÷.5626	6850	8672
	.050	1787	3816	5587	6788	8278
	.150	0567	- 3551	- 5500	5654	7043
	.300	0897	2008	4356	4832	4802
	5217	2531	2615	÷.3€03	4571	3923
	. 7 <i>5</i> Ĵ	51 55	7482	7168	7336	7836
	.900		5646	7369	7100	<b>7</b> 098
ALPHA ( 2) =436 BETA ( 2) = .009	Z/BV X/CV	.158	.316	. ୧୯୯୯	.840	.925
	.000	.7005	. 5629	5082	. 5221	.5070
	.025	.1086	0239	1614	1966	2313
	.050	-3170	.0011	1368	1253	1568
	.150	.2144	1016	.0363	·0455	0007
	.300	.Ué39	0222	.0128	0139	0376
	.520	0710	0882	0962	÷.0741	֥1557
	. 753	4359		6820	<del>6</del> 988	7126
	.900		4758	-,6650	5882	6598
ALPHA (2) =573 BETA (3) = 4.028	Z/BV	1 58	:316	. 200	.840	.925
	X/CV					7.500
	.000	. 5923	.4312	.3397		.3528
	.025	.5036	.3818	.2666		.2797
	.050	.4974	.3601	.2861	.2666	.2174
	.1 50	.3575	.2758	.2397		1450
	-300	.2097	.1739			.0405
	. 520	.0436	.0088	0073	.0089	- 1393
	.750	4413	6101	6321	6722	7196
	.00e.		4410	5887	6448	7025

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### TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

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### ARC11-0141A19 OTS+STRUT SRB-HI MPS-HI VERTICAL

REUV18)

SECT	TON	1. 1	I VED	TIC	M.

ALPH	A (	3)	=	3	915	BETA	( )	<b>()</b>	8	.00	9	Z/BV X/CV	-1 58	.316	. 600	.840	.925
	10											.000	6729	.4888	4086	.4180	.4146
												.025	.0616	0849	2179	2383	2637
												.050	.2521	0757	1899	1774	1954
												.150	.1477	.0305	0375	0197	0553
												300	.0088	0578	0546	0635	0933
												. 520	1465	1483	1464	1209	2004
										"		. 750	4571	7060	6966	7111	7317
												.900		5011	6805	7004	6886

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# ARC11-014TA19 OTS+STRUT SRB-HI MPS-HI VERTICAL

(REUV19) ( 19 CCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

			2.0			_					
SREF	=	2690.0000 SQ.FT.	XMRP	=	976.0000 IN.	XT	. ELV-IB	=	0.000	ELV-CB =	4.000
LREF	=	1290.3000 IN.	YMRP	=	.0000 IN.	YŦ	RUDDER	=	.000	MACH =	1.250
BREF	=	1290.3000 IN.	ZMRP	Ξ	400.0000 IN.	ZT	GIMBAL	=	1.000		
SCALE	-	China									

SECTION ( 1) VERTICAL

SECTION ( 1) VERTICAL	DEPENDENT VA	RIABLE C	<b>.</b>					
ALPHA ( 1) = -4.185 BETA ( 1) =009	Z/BV X/CV	1 58	.316	.600	.840	.925		
	.000	.7775	6509	.6247	6347	.6292		
	.025	-2039	.0689	0647	1086	1219		
	.050	.3513	-1034	0556	0573	0740		
and the second s	.1 50	.3231	.2022	.1270	-1411	.1019		
	•300	.1868	.1249	.1020	.1050	.0854		
	. 520	.0196	.0220	.0306	.0619	0013		
	.753	3205	4979	4835	-,4901	5050		
	•900		3607	4782	- 4906	4664		
ALPHA (2) =459 BETA (1) = -4.000	Z/BV X/CV	-158	316	.600	.840	-925	•	
	.000	. 6391	.5759	.5449	· 5039	.4962		
	-025	0975		4149		6579		
	.050	1143		4138		6482		
	-150	0978	2248	3835	4950	5770		
	-300	.0704				4440		
	-520	1302	1542	2359	2511	1954		
	.750	3862	5599	5346	5647	5638		
	•900		4238	5553	5391	5459		
ALPHA (2) =438 BETA (2) = .012	Z/BV X/CV	. 1 58	-316	. 600	.840	.925		
	.000	.7180	.6126	- 5480	· 5505	- 5524		
	.025	.1256			1291			
	.050	.2983			0732	0801		
	-150	.2738	1689	.0842	0993	.0690		
	.300	.1548	.0845	.0563	D640	.0440		
	. 520	0101	0184		.0229	0380		
	. 751	3320	5108		5006			
	.900			4892	5006	49(19		
ALPHA (2) =549 BETA (3) = 4.028	X/CV Z\BV	1 58	.316	•e00	.840	.925		
	-000	6372	. 5.724	. 43 60	4590	.4542		
	.025	-5105	4190	.2987	.3238	3572		
	.050	.5205	.4033	3349	.3290	3024		
	-1 50	4024	3203	.2905	.2972	2392		
	·300	.2656	.2234	.2277	.2217	.1574		
	- 520	-1001	·D951	1063	.1317	.0023		
	, 750	- 3349	4517		4737	51 73		
	.900		3473		4804	5113		

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### TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

PAGE 837

	RC11-014TA19 OT	S+STRUT SR	RB-HI MPS	-H! VE	RTICAL		(REUV19)
SECTION ( 1) VERTICAL	DEPENDENT VAI	RIABLE CP					
ALPHA (3) = 3.516 BETA (1) = .012	Z/BV X/CV	-1 58	.316	. 600	.840	.925	
	.090	.7007	. 5341	.4591	. 4541	4551	
	.025	.0128	0330 -	.1413	1833	1909	
	-050	.2591	0233 -	.1370	1331	1485	
	-150	.1982	.0910	.0216	.0420	.0097	
	-300	0803	.0202	.0000	.0020	0145	
	· 52U ·	0771	0768 -	.0674	0342	0891	

.750 -.3508 -.5486 -.5263 -.5295 -.5520

-.3890 -.5227 -.5255 -.5264

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# ARC11-0141A19 OTS+STRUT SRB-HI MPS-HI VERTICAL

(REUV20) ( 19 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

.3080

-1074

.3469

.2870

.2182

.2768

.1829

-.3130 -.2974 -.3176 -.3646

-.2760 -.3262 -.3102 -.3242 -.3637

SECTION ( 1) VERTICAL  DEFENDENT VARIABLE CP  ALPHA ( 1) = -4.167 BETA ( 1) = .003  2 /BV  X/CV  1.58	LREF	=	1290 1290	.0000 \$ .3000 1 .3000 1	IN.	XMRP YMRP ZMRP	=		.0000	IN. XT IN. YT IN. ZT					ELV-IB = RUDDER = GIMBAL =	8.000 .000 1.000	ELV-CB MACH	± 4.000 = 1.400
**************************************	SECT	CN	(: 1)	VERTICA	AL.				DEF	ENDENT V	ARIABLE CP	ļ						
1,000	ALPHA	(	) =	-4.167	BETA	( <b>1</b> )	= ,	.003			.158	.316	. 600	.840	.925			
.025 .2180 .1999 .012604230901 .050 .3003 .1602 .0200 .0084 .0045 .190 .3000 .2434 .1922 .0233 .1637 .300 .2466 .1884 .1606 .1670 .1997 .520 .0869 .0905 .1299 .0816 .791 .26343664345634693662 .900350235023425 .9003502342638923432  ALPHA (2) =489 BETA (1) = -4.003  Z/BV .158 .316 .600 .840 .925  X/CV .000 .6762 .6124 .5918 .5573 .5377 .025119904253231 .44644880 .09012631396 .3231 .44605223 .19012631396 .3231 .44644880 .09012631396 .3231 .44644880 .09012631396 .3231 .44644880 .09012631396 .3231 .44644880 .09012631396 .3231 .44644880 .090126313963231 .44644880 .09012631396 .3231 .44644880 .090126313963231 .44644880 .090126313963231 .44644880 .090126313963231 .44695223 .300 .1624081917741531 -1.4581457 .300 .31454172412741254173 .300 .31454172412741664163 .100 .3166 .6607 .3868421741664163 .000 .6760 .001102660261 .110 .3301 .2134 .155 .199 .1371 .300 .2051 .1294 .1065001102660261 .110 .3301 .2134 .155 .199 .1371 .300 .2051 .194 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0961 .0497 .75027083759336635563576 .9003578336635563556 .3576 .9003578336635553599  ALPHA (2) =486 BETA (3) = 4.025											. 7763	. 71 41	.6538	. 6763	6644			
193									1.5						0 <i>5</i> 01			
190																		
300 .2466 .1884 .1806 .1670 .1917  .520 .0899 .0865 .0995 .1299 .0816  .791 .2634 .3666 .3469 .3662  .900 .3646 .3502 .3466 .3502 .3432  ALPHA (2) =489 BETA (1) = -4.003																		
1.520   .0859   .0865   .0995   .1299   .0866   .799   .3662   .3466   .3469   .3466   .3469   .3466   .3469   .3466   .3469   .3426   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3432   .3466   .3466   .3468   .3432   .3432   .3466   .3468   .3432   .3466   .3468   .3432   .3466   .3468																		
ALPHA (2) =489 BETA (1) = -4.003  Z/BV																		
ALPHA (2) =489 BETA (1) = -4.003  Z/BV																		
NCV			1.															
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025	ALPHA	(	2) =	489	BETA	(1)	= -4	.003		Z/BV	.158	-316	.600	.840	.925			
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										X/CV								, Q
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										.000								F 27
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										.025	1159	0425	3231	4946	4880			75
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										.050								28
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										.150								$\approx 8$
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										.300								
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										. 520	0425	0747	1 531	1458	1457			& `
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025										. 750	3145	4172	4127	4385	41 59			77.70
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025	•									.900		3828	4217	4166	4163			E S
.025 .1257 .1620014906480736 .025 .1257 .1620014906480736 .050 .2094 .1065001102660261 .150 .3301 .2134 .1555 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025	ALPHA	• (	5) =	432	BETA	( 5)	=	.009			.158	.316	. 600	.840	.925			A IS
.050 .2094 .1065001102660261 .150 .3301 .2134 .1556 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975										.000	.7088	.6667	-5934	.€019	- 5999			
150 3301 .2134 .1556 .1589 .1371 .300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599  ALPHA (2) =486 BETA (3) = 4.025 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975										.025	.1257	-1629	0149	13648	0736			
300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599 ALPHA (2) =486 BETA (3) = 4.025 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975										.050	.2094	.1065	0011	0266	0261			
300 .2051 .1494 .1229 .1250 .1184 .520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599 ALPHA (2) =486 BETA (3) = 4.025 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975												.2134	.1556	.1589	,1371			
.520 .0540 .0489 .0616 .0951 .0497 .75027083759358035563756 .9003578356635513599 ALPHA (2) =486 BETA (3) = 4.025 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975						. 19				.300	.2051	.1494	.1229	.1250	.1184			
.7502708375935603756 .9003578356635513599 ALPHA (2) =486 BETA (3) = 4.025 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975												.0489	.0616	.0951	.0497			
9903578356635513599  ALPHA (2) =486 BETA (3) = 4.025 Z/BV .158 .316 .600 .840 .925  X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975												3759	3580	3556	3756			
X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975													3566	3551	3599			• •
X/CV .000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4697 .3456 .3558 .3975	AL FHA		2) =	486	BETA	( 3)	= 4	.025		Z/BV	.1 58	-316	. 600	-840	.925			
.000 .6740 .5400 .4901 .5220 .5157 .025 .5144 .4897 .3456 .3558 .3975		•																
.025 .5144 .4697 .3456 .3558 .3975											.6740	- 5400	.4901	. 5220	.5157			
														-3558	-3975			
														.3732	.3687			

.150

.300

. 520

.750 .900 3089

.2610



DATE DI MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 839

# ARC11-0141A19 OTS+STRUT SRB-HI MPS-HI VERTICAL

(REUV20)

SECTION ( 1) VERTICAL

						600	.840	.925
ALPHA ( 3) =	3.657 BETA	(1) = .009	Z/BV X/CV	.1 58	.316	.600	.640	.523
			.000	.6733	. 5881	.5096	. 53148	. 50143
			.025	0359	.0794	0668	1079	1146
			.0150	.1923	.0244	0548	0575	
			.150	.2236	-1 581	.0922	.1061	.1039
			.300	.1374	.0832	.0647	.0726	.0596
			. 520	.0008	0071	.0040	.0440	
			. 750	2783	4116	3861	3808	
			.900		3567	3866	3794	5915

# ARC11+014IA19 OTS+STRUT SRB-OFF MFS-OFF VERTICAL (REUV21) ( 19 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

LREF =	2690.0000 Sq. 1290.3000 IN. 1290.3000 IN.	YMRP =	.000	OD IN. XT OD IN. YT					ELV-IB = RUCCER = GIMBAL =	8.000 .000 1.000	ELV-CB	= .000 = 1.400
SECTION	( 1) VERTICAL		DE	EPENDENT VA	RIABLE CF							
ALPHA (:	1) = -4.200 E	BETA (1) =	.003	Z/BV %/CV	.158	.316	.000	.840	.925			
				.000	.7822	.7265	.6596	. 6804	.6691			
				.025	.2221	.2829	.0157	0358	0474			
				.050	-3172	.1686	.0256	.0142	.0062			
				.150	.3869	.2589	.19€0	.1996	.1717			
				.300	-2514	.1900	.1652	.1700	-1562			
				520	.0895	.0855	.1008	.1355	.0882			
				. 750	3092	3615	3410	3415	3601			
				.900		3673	3391	3454	3383			•
ALPHA (	2) =180 (	BETA (1) = -	4.000	Z/BV X/CV	-158	.316	.609	.840	.925			
				.000	.6726	6104	-5918	.5498	.5334			
				.025	1152	.0527	3218	-,4927	4845			
			•	.0 <i>5</i> 0	1210	1403			5189			
				·153	0951	1397	2765	-,4027	4167			
	11.			.300					- ,3297			
				. 520	0409	0754	1536	1483	1360			
				.751	3458	4157						
				•900		4321	4225	4145	4139			
ALPHA (	2) = -,291	BETA (2) =	.012	Z/BV X/CV	.158	.316	.600	.849	.925			
			*	.000	7.1160	.6670	5891	. 5936	.5945			
				.025	.1069	.2279	0113	0547	0680			
	4			.050	.1928	.1094	0027	0151	0169			
				.150	.3267	.2213	.1484	.1607	.1420			
				.300	2085	.1458	.1232	.1284				
				. 520	·0550	.0492	.0601	.0984				
				. 753	3166	3779	3582	3566				
				.900		3871	3585	3569	3617			
ALTHA (	2) =3/16	BETA ( 3) =	4.028	Z/BV X/CV	-158	.316	. භාග	.849	.925			
				.000	6693	. 5367	. 48 64	. 5184				
				.025	5179	.4787	.3439	.3566				
					• 534 <b>5</b>	.4381	.3788	.3729				
				. 150	4310	3655	•3310	.3457	3076			
				•300	.3067	.2610	.2767	<b>.2</b> 8 54				
				520	.1513	.1567	.1833	.2196	.1087			
				750	3263	3565	3089	3225	3625			
				, <u>ອ</u> ຕຸຕ		2500	2955	31 62	-,3636			



DATE OF HAY 75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 841

# ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV21)

SECTION ( 1) VERTICAL

ALPHA ( 3) = 3.969	BETA ( 1) =	.006	Z/8V X/CV	-1 58	316	. 600	.845	.925
			.000	. 6625	5765	.4973	.4946	. 4923
			.025	0309	.1543	0668	1131	1197
			,050	.2006	.0245	0593	0552	0655
			.150	-2183	.1521	.0855	.1018	.0949
			-300	.1347	.0820	.0568	.0654	.0562
			- 520	0051	0095	0025	.0394	000
			. 750	3193	4158	3893	3848	4334
			.900		4096	3869	3812	3944

### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV22) ( 19 OCT 74 )

DADAUETETC DATA

.1590

.1556

.0822

-.3655

-.3433

.925

REFERENCE DATA			PARAMETRIC DATA
SREF = 2690.0000 SQ.FT. XMRP = LREF = 1290.3000 IN. YMRP = BREF = 1290.3000 IN. ZMRP = SCALE = .0200	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT		ELV-IB = 8.000 ELV-CB = .000 RUDDER = .000 MACH = 1.400 GIMBAL = 1.000
SECTION ( 1) VERTICAL	DEPENDENT VARIABLE CP		
ALPHA ( 1) = -4.167 BETA ( 1) =	.006 Z/BV .158 X/CV	.316 .600 .840	.925
	.000 .7794	.7192 .6575 .6785	.6630
	.025 .2145	.2124 .01890438	0510
	.050 .3091	.1627 .0228 .0163	.0194

.3830

.2464

.0857

-.2992

.2575

.1886

.0854

-.3666

-.3664

.1911

.1614

.0942

-.3456

-.3441

.1694

.1301

-.3459

-.3504

.900 Z/BV .600 .840 .316 ALPHA (2) = -.348 BETA (1) = -3.997 X/CV

-150

.300

. 520

. 753

.5549 .000 .5910 .6748 . 61 45 -.1135 -.0304 -.3225 -.4945 -.4855 .025 -.1229 -.1421 -.3226 -.4700 -.5192 .050 -.1054 -.1403 -.2772 -.4025 -.4162

.150 .1656 -.0799 -.1778 -.2570 -.3295 .300 -.0411 -.0759 -.1516 -.1449 -.1358 . 52!3 -.3426 -.4162 -.4130 -.4362 -.4122 . 753 -.4280 -.4229 -.4142 -.4137 .900

Z/BV .600 .840 ALPHA (-2) = -.366 BETA (-2) = .012 .158 .316 X/CV .6006 .000 .7102 .6688 . 59 53 -.0746 -.0069 -.0826 .025 .1213 .1655 -.0101 -.0264 ,050 .2025 .1084 -.0074 .1612 .1436 .2172 .1558

.150 .3288 .1458 .1249 .1345 .1181 .300 .2076 .0554 .0505 .0603 .0988 .0499 .520 .750 -.3074 -.3765 -.3575 -.3563 -.3786 -.3587 -.3623 -.3834 -.3566 .900

.eon .849 ALPHA ( 2) = -.522 BETA ( 3) = 4.031 Z/BV .158 .316 V/CV

.000 .6732 .4880 . 5216 . 51 70 . 5410 .3979 .025 .5132 .4696 .3441 .3527 .3709 .3695 .050 .5333 .4381 .3787 .150 .4347 .3649 .3333 .3426 .3084 .2363 .2750 .2854 .300 .3132 .2645 . 520 .1533 .1566 .1822 .2196 .1083 -.3237 -.3634 -.3193 -.3279 -.3106 . 750 -.3213 -.2973 -.3171 -.3638

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DATE OI MAY 75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 843

# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV22)

SECTION ( 1) VERTICAL

ALFRA ( 3) = 3.942	BETA (1) =	.012	Z/BV X/CV	.1 58	.316	. 600	.849	.925
			.000	. 6710	. 5799	.5022	.4988	.4947
			.025	0318	.0833	0680	1093	1147
			.050	.2020	.0280	0577	0589	0694
			-150	-2194	.1535	.0869	.1041	.0968
			.300	.1357	.0814	.0558	.0664	.0558
			. 520	0032	0099	.0012	.0390	0057
			. 750	3976	4161	3994	3852	4942
			.900		4011	3888	3834	3956

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV23) ( 19 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

.000 ELV-08 = .000 ELV-IB = SREF = 2690,0000 SQ.FT. XMRP = 976,0000 IN. XT RUDDER = .000 MACH = .900 LREF = 1290.3000 IN. YMRP = .0000 IN. YT GIMBAL = 1.000 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200

SECTION ( 1) VERTICAL	DEPE	NDENT VAR	TABLE CP				
ALPHA ( 1) = -4.047 BETA ( 1)	= .000	Z/BV X/CV	.158	.316	.600	.840	.925
		.000	- 53/34	.3992	.4261	.4687	.4250
		.025	0808	1536	4951	4724	5291
		.050	.1333	2261	3523	3631	4495
		-150	0254	1315	1582	1708	1834
		•300	1714	1750	1849	2192	2460
		- 520	2945	2.3001	3277	2802	3875
		. 750	3137	4009	4896	3592	2643
		.900		2816	3577	3502	5162
ALPHA (2) =276 BETA (1)	= -4.003	Z/BV X/CV	.158	.316	. 600	.840	.925
		.000	.3855	-3200	.3204	.2481	-2144
		.025	4548	4555		-1.0256	0000
		.050	4997	7361		-1.0300	.0000
		-150	2574	6009	8870	8947	9932
		•300	3761	4640	7887	8194	7867
		- 520	5423	4373	6320	7315	5280
		750	3477	3635	5368	4167	3153
	•	900		3364	3505	3743	2423
ALPHA (2) =237 BETA (2)	= .009	Z/BV	-158	.316	. 600	.840	.925
		X/CV					
		.000	5.759	.3657	.3211	4050	.3955
		.025	1064	1611	4422	4348	4616
		.050	.0971	-,2616	3967	3388	3634
		.150	0587	1720	2034	1514	1600
		•300	2035	2478	2174	2012	2215
and the second of the second o		- 520	3087	- 31 56	3443	2648	3731
	,	.750	2443	- 3780	4230	3285	2157
		•900		2873	3200	2993	-,1461
ALPHA (2) =195 BETA (3)	= 4.028	Z/BV X/CV	.1 58	316	• 600	.845	.925
		.000	.3977	-2353	.1382	.1952	.1639
	And the second	.025	.2984	.2010	-1119	.1300	.1446
		.050	2850	.1754	.1212	.1144	.0603
		-1 50	.1428	.1044	.0603	.0457	0244
		300	0210	0069	0375	0710	1535
		. 52!)	1378	- 1969	2366	2017	3746
		. 75/1	- 2582	3404	5464	8371	6542
		.900		2470	2844	4053	3171



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### ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV23)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA	- (	3)	=	3.855	BETA	(1)	=	.003	_		.1 58	.316	. 600	.840	.925
									. х	VCV					
										- 1000	.4690	.2920	.2324	.3576	-3118
										.025	1941	2349	4986	4102	4533
										.050	.0087	3398	4615	2852	3649
	. *									.150	1286	2505	2130	~.1608	1946
									100	•300	2788	3219	1622	2264	2572
										. 520	3727	3299	-,3180	3004	4166
										. 791	- 25/8	- 2721	- 4466	- 3/05	- 2227

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-.2725 -.2434 -.3222 -.1462

### ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV24) ( 19 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF = 2690.0000 \$0.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRP = 976.0000 YMRP = .0000 ZMRP = 400.0000	IN. YT					ELV-IB = RUCDER = GIMBAL =	.000 - ELV-O		.000 .100
SECTION (1) VERTICAL	DEP	ENDENT VAI	RIABLE CF							
ALPHA ( 1) = -3.993 BETA	(1) = .009	Z/BV	-1 58	.316	.600	.840	.925		• .	
		X/CV								
		-000	.7215	. 59 58	. 5574	. 5876				
		.025	.1758	.0925	1583		2440			
		•050	3599	.0273		1351				
		.150	.2349	.1238	.0549	.0575	.0189			
		•300	.1996	.0452	.0336	.0032	0229			<b>\</b>
		• 52/3	0578	0642	0803	0556	1419			
		. 750	3784	6822	6919	7088	7185			
		.900		4188	6784	6997	6592			
ALPHA ( 2) =279 BETA	(1) = -4.003	Z/BV X/CV	158	.316	. හාව	.840	.925			
	7 No. 10		5909	. 51 68	+4710	. 41 52	.3932		O IS	
	S. Carlotte	.025	1549	- 1863	-,5694	7417	8927			
		.050	1859	3984	5633	7373	8576		田日	
		150	0603		5473	6721	7598		2 Z	
		300	0778	2235	4678	4954	4937		25	
		520	2616		3753	4529	3811		ر ج	
		750	- 4359		- 7268				جہ لتا	
		.900			7564					
ALPHA ( 2) #246 BETA	(2) = .009	<b>Z</b> /BV X/CV	.1 58	.316	භාග	.840	.925		ORIGINAL PAGE IS OF POOR QUALITY	
		.000	. 6923	.5596	.4953	.5185	4959	(	<b>D O</b>	
		.025	.1924	.0769	1713	2133	2416			
		.050	-3112		1418	1454				
		•150	.2013	.0932	0226		0133			
		.300	.0736	.0152	.0001		0494			
		.520	0833	0948	1081		1682			
		. 750	3774		6948		7280			
			-15114	6867						
		.900		4219	6791	/019	6/52		·	
ALPHA ( 2) =273 BETA	(3) = 4.025	Z/BV X/CV	.1 59	.316	. 600	.840	.925			
		.000	. 5827	. 4313	.3226	.3672	.3435			
		.025	.4988	.3827	2567	.2565	.2710			
		.050	. 4904	3518	.2758	.2527	.2085			
		1 50	.3488	.2700	2199	2038	.1364			
		.300	2032	.1655	1410	.1100	.0326			

520

.900

.0362 .0012 -.0190 .0037 -.1485 .750 -.4054 -.6122 -.6448 -.6817 -.7300

-.4265 -.6016 -.6557 -.7141



# DATE 01 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 847

ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF VERTICAL

(REUV24)

SECTION ( 1) VERTICAL

ALPHA	3)	=	3.894	BETA	(1)	=	003	Z/BV X/CV	.158	-316	.600	.840	.925
. 4								.000	6690	.4930	4911	.4196	4007
								.025	.0563	.0340	2255	2516	2721
								.050	.2513	0804	2058	1853	1981
			•					.153	.1443	.0285	0480	0290	0639
								300	.0066	0518	0628	0703	1002
								-520	1495	1523	1560	1271	2134
				•				. 750	3916	6989	7119	7238	7463
								. ann		- 4344	- 6055	- 7147	- 7006

### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV25) ( 19 CCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

.000 ELV-08 = .000 ELV-IB = 976.0000 IN. XT SREF = 2690.0000 SQ.FT. XMRP = MACH = 1.250 RUDDER = .000 LREF = 1290.3000 IN. YMRF = .0000 IN. YT GIMBAL = 1.000 ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

SCALE = .0200

SECTION ( 1) VERTICAL DE	PENDENT VAR	RIABLE CP	ı			
ALPHA ( 1) = -3.975 BETA ( 1) = .003	Z/BV X/CV	.158	.316	.600	.840	925
	.000	.7773	.6637	. 61 66	. 6400	.6254
	.025	.2978	.1787	0611	1061	1172
	.050	3550	.1003	0453	0494	0642
	.153	.3260	-2041	-1252	.1406	.1193
	.300	.1878	.1226	.1025	-1075	.0856
	.520	.0195	.0219	.0315	.0610	0035
	. 750	3252	5000	4869	4943	5090
	.900		3689	4804	4950	4713
ALPHA ( 2) =255 BETA ( 1) = -4.000	Z/BV X/CV	.158	.316	•600	.840	.925
	.000	. 6401	.5785	.5425	.4984	.4837
	.025	1043	0541		6597	
	.050		2540		6162	6613
	150	1144		3892	5791	5884
	300	.0651	1285	2975	3088	4552
	.520	1355	1606	2467	2547	2081
	750	3696	5650	5391	5693	5715
	.900		4129	5631	5468	5522
ALPHA ( 2) =285 BETA ( 2) = .012	Z/BV	.158	.316	. 600	.840	.925
	XVCV					
	.000	7139	.6188	.5439	. 5647	-5493
	.025			0932	1331	1416
	.050	.2921	.0579	0764	0841	0877
	-150	.2751	.1685	.0807	.0976	.0739
	.300	.1521	.0796	.0557	.0656	.0451
	520	0103		0075	.0235	0377
	. 750	3255	5123	4957	- 5006	5214
	.900		3771	4914	5106	4917
ALPHA ( 2) =189 BETA ( 3) = 4.031	Z/BV	. 1 58	.316	.600	.849	.925
	X/CV					
	.000	.6288	- 5014	.4216	.4591	.4425
	.025	5.173	.4325	.2978	-3123	.3442
	.050	. 5134	3993	.3297	.3217	.3007
	1 50	.3977	.3143	.2831	-2856	.2328
	• 300	.2612	.2189	.2171	.2135	.1491
	. 520	.0951	.0941	.0962	.1227	0052
	. 750	3393	- 4568	4566	4809	5236
	900		3550	4296	4686	5191



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ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV25)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

	1.0				. "							
ALPHA ( 3	3) =	4.005	BETA	(1)	=	.003	Z/BV X/CV	1 58	-316	. 600	.840	.925
							.000	7013	. 5444	4533	.4644	4531
							.025	.0303	.0970	1334	1712	1782
							.050	.2710	0131	1207	1166	1160
							1 50	.2028	.0978	.0226	.0460	.0275
							- 300	.0834	.0222	.0017	.0068	0109
				er er er er Fransk			52!1	0709	0731	0639	0300	0884
							. 750	3459	5459	5252	5282	5513
							•900		3871	5201	5236	5275

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.000

1.400

# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV26) ( 19 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF = 2690.0000 \$0.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	YMRP =	6.0000 IN. XT ,0000 IN. YT 0.0000 IN. ZT					ELV-IB = RUDDER = GIMBAL =	.000 .000 1.000	ELV-CB = MACH =
SECTION ( 1) VERTICAL		DEPENDENT VA	RIABLE CP						
ALPHA ( 1) = -3.909 BETA	(1) = .009	2/BV X/CV	.1 58	.316	.600	.840	.925	,	
		.000	.7798	.721.8	.6543	.6775	.6607		
		.025	2203	.2544	.0217		0550		
		.050	-3110	.1646	.0196	.0097	.0071		
		.150	3846	-2581	.1935	.1932	.1695		
		.300	2488	.1867	.1612	.1709	.1544		
		520	.0860	.0824	.0970	.1334	.0842		
		.750	2933				3639		
		.900	12300	3682			3429		
ALPHA ( 2) =243 BETA	(1) = -4.000	<b>Z/</b> BV X/CV	1 58	.316	.609	.84D	.925		
		.000	.6736	6137	.5875	. 5499	.5356		
		.025	1128	.0410	3276	4972	4863		
		.050	1201	1380	3258	4724	- 5220		
		.153	0948	1403	2776	4951	4194		
		.300	.1668	0807	1837	2579	3326		
		. 520	0399	0773	- 1554	1462	1356		
		. 7 <i>5</i> 0	3342	4188	- 4162	4377	4142		
		.900		4197	4264	4167	4180		
ALPHA ( 2) =237 BETA	(2) = .012	Z/BV X/CV	.1 58	.316	. 600	.840	.925		
		.000	. 7033	. 6631	.5872	- 5914	5905		
		.025	.1050	.2122	0197	0715	0764		
		•U <i>5</i> 0	1839	.0985	0066	0112	0215		
		-150	3224	.2151	.1446	.1550	1380		
		300	.2043	.1444	-1154	.1256	.1993		
		. 529	.0515	.0485	.0534	.0942	.0422		
		. 751	3001	3824	3644	3621	3846		•
		.900		3890	- 3633	3641	3666		
ALPHA ( 2) = -,234 BETA	(3) = 4.031	Z/BV X/CV	.158	.316	. 600	.840	.925		
		,000	6693	.5345	4803	. 5134	. 5.194		
		.025	51 78	.4778	.34114	.3495			
		•0 <i>5</i> 0	5349	.4424		-3701	.3672		
		• 1 50	.4287	.3696		.3387			
		300	30 59	.2602	.2710	.2851	.2339		
		.520	1491	.1554	.1 761	.2173			
		750	3180		- 31 61	3272			
		.900	. 5100		- 3031	3228			
		1900		I DE CC	- 10001	1266	•5002		



DATE DI MAY 75

### TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

FAGE 851

### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

-.3957 -.3974 -.3889 -.4032

(REUV26)

SECTION ( 1) VERTICAL	DEPENDENT VARIABLE CP					
ALFHA (3) = 4.047 BETA (1) = .006	Z/BV .158	.316	. 600	.840	.925	
	.000 .663	.5777	. 49 50	. 4899	.4894	
	.0250241	1495	0720	1163	1226	
	.050 .2022	.0244	0559	0606	0723	
	150 2199	1514	.0857	.0981	.0915	
·	-300 -1351	.0777	.0557	.0614	.0552	
	- 520 - 0066	0132	0026	.0367	0082	
	-7503030	4240	3958	3897	4109	

ARC11-0141A19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV27) ( 19 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

 SREF = 2690.0000 SQ.FT.
 XMRP = 976.0000 IN. XT
 ELV-IB = .000 ELV-CB = .000

 LREF = 1290.3000 IN.
 YMRP = .0000 IN. YT
 RUDDER = .000 MACH = .900

 BREF = 1290.3000 IN.
 ZMRP = 400.0000 IN. ZT
 GIMBAL = 1.000

SCALE = .0200

SECTION ( 1) VERTICAL	DEPENDENT VAR	TABLE CP			•	
ALPHA ( 1) = -4.125 BETA ( 1) = .000	Z/BV X/CV	. 1 58	.316	.600	.840	.925
	.000	. 5287	-3905	.4081	.4485	.4078
	.025	0696	1600	4325	5005	5572
•	•0 <i>5</i> 0	.1325	2202	3900	4180	4721
	.150	0255	1291	1887	1993	2236
	.300	1701	1899	2175	2655	2838
	. 520	3067	3478	3629	3219	4271
	. 750	5165	6753	-1.1243	8713	5580
	.900		5553	7132	e765	<b></b> 4499 .
ALPHA (2) =396 BETA (1) = -4.003	Z/BV X/CV	-158	.316	. 600	.840	.925
	.000	3822	.3195	.3152	.2454	.2159
	.025	4645	5384	9231	-1.0614	.0000
	.050	5090	7459	9192	-1.0602	.0000
	.150	2586	6083	91115	9175	-1.0224
	. ממצ	3794	4798	7961	8370	8257
	. 520	5541	5387	6557	8055	7246
	.750	5901	6901	-1.1270	6773	<del>@</del> 023
	.900		6243	6615	4964	4893
ALPHA (2) =408 BETA (2) = .009	Z/BV X/CV	.1 58	.316	. 600	.840	.925
	•000	. 4923	.3438	.3220	.3924	.3625
	.025	1191	2253	4557	4922	5353
	.0 <i>5</i> 0	.0827	2817	4096	3927	4633
	.150	0746	1879	2309	2063	2336
	.300	2219	2577	2494	2654	2869
	. 520		3816		3279	4318
	. 750	4874		-1.1080	5660	4021
	.900		5535	5357	5225	3466
ALPHA ( 2) =336 BETA ( 3) = 4.025	7/8V X/CV	.1 58	-316	•600	.840	.925
		* *013.0	2012	4 717 P	40713	4.654
	.000	3806	.2216	-1395	1930	15.14
	.025	.2764	1739	-0946	1013	.0922
	.050	.2686	.1540	.1068	.0826	.0093
	-150	.1124	.0750	.0403	.0158	0718
	300	0211	0225	0600	1086	
	- 520	1881	2272	-,2679	2430	4308
	.750	4968		-1.0290		8178
	.900		49/7	7444	6/31	5760



### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV27)

SECTION ( 1) VERTICAL

DEFENDENT VARIABLE CF

ALPHA (3) = 3.792 BETA (1) =003	Z/BV X/CV	1 58	316	. ເນດ	.840	.925
	.000	.4652	.2826	-2164	- 3258	.3113
	.025	1916	2909	5249	4771	5056
	-0.50	.0113	3343	4902	3743	4086
	.153	1298	2497	2997	- 2062	2263
	•300	2816	3329	3045	2678	2885
	- 520	4234	43 <del>69</del>	4100	3310	4493
	. 750	4656	~. 8723	7205	-,4941	3497
	.900				4525	

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# ARC11-014IA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

# (REUV28) ( 19 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

.000 ELV-CB = .000 ELV-IB = SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT MACH = 1.100 RUDDER = .000 LREF = 1290.3000 IN. YMRP = .0000 IN. YT. GIMBAL = 1.000 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT

SCALE = .0200

DEPENDENT VARIABLE CP SECTION ( 1) VERTICAL

ECHON	( 1) VERTICAL				~~.	 	

SECTION ( 1) VENTICA	_								
ALPHA ( 1) = -4.191	BETA	(1) =	.003	Z/BV X/CV	.158	316	.600	.840	.925
				.000	. 7220	.5937	5584	. 5876	.5614
				.025	.1771	.0689	1636	2048	2454
				.050	.3600	.0294	1329	1356	1717
				.150	.2335	.1225	.0557	.0557	.0167
				.300	.0984	.0394	.0336	.0006	0251
				.520	0595	0666	0836	0567	1421
				. 750	4739	6909	6958	7116	7218
				.900		5137	6818	7029	6605
ALPHA ( 2) =465	BETA	(1) = -	-4.003	Z/BV	.158	.316	<b>e</b> 00	.840	.925
Ac				X/CV					
				.000	. 5953	. 5221	4749	.4244	.3995
				.025		2651		7415	8905
				.050	1837	3946	5612	7321	8555
				.150	0565	3313	5371	5999	7554
				.300	0729	2161	4621	- 4875	4825
				• 520	2568	2676	3689	- 4512	-,3711
				.750	55.13	7590	7222	7431	79/18
				.900		6150	7524	7232	7215
ALPHA ( 2) =447	BETA	( 2) =	.012	Z/BV X/CV	.158	.316	.600	840	.925
				.000	.6963	, 5658	.5006	. 5232	. 5031
				.025	.1070	.0269	1711	2050	2445
				.050	.3162	0023	1377	1348	1624
				.150	2096	.0974	.0282	.0377	0040
				300	.0819	.0178	.0073	0141	-,9433
				.520	0766	0897		0745	1617
				750	4743	6883	6899	7050	7205
				.900		5159	6742	6958	6681
ALPHA ( 2) =405	BETA	(3) =	4.031	Z/BV	.158	.316	. 200	.840	.925
				X/CV			7666	777.	.3518
				.000	5872	.4338	.3296	.3774	.2732
				.025	. 5129	.3824	.2617	.2619	.2121
				.050	.4936	.3596	.2837	2563	
The second of the second				.150	.3535	.2739	.2250	.2089	.1410
				.300	.2039	.1702	.1430	.1154	
				. 520	,0401	.0054	0146	.0070	
				. 750	4666	6193	6423	6802	7282
				.900		4635	6002	6542	7126



DATE OI MAY 75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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### ARC11-0141A19 OTS+STRUT SRB-NOM MFS-NOM VERTICAL

(REUV28)

SECTION ( 1) VERTICAL

ALPHA ( 3) = 3.819 BETA (	1) = .009	Z/BV X/CV	-1 58	.316	•600	.845	.925
		.000	.6729	. 4964	.4041	.4315	.4113
		.025	.0584	0388	2199	2491	2676
		,050	.2562	0732	1935	1879	1980
		•150	.1487	.0334	0406	0202	0536
		.300	.0112	0480	0596	0624	0925
		.520	1430	1487	1502	1186	2050
		. 750	4979	7125	7041	7171	7396
		.900		5433	6890	7080	6960

(REUV29) ( 19 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

LREF	=	0000, 000 1 0000, 000 1 0000, 000 1 0000	IN.	YMRP	=	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT	ELV-IB = RUDDER = GIMBAL =	.000 .000 1.000	ELV-CE MACH	.000 1 .250
SECT	I CW	(1)VERTI	CAL			DEPENDENT VARIABLE CP				

SECTION ( 1) VERTIC	AL		DEF	ENDENT VA	RIABLE CE	•			
ALPHA ( 1) = -4.080	BETA	(1) =	.006	Z/BV X/CV	.1 58	.316	.600	.840	.925
				.000	.7779	.6627	.6207	.6453	.6889
				.025	.2139	-1 580	0593	1017	1104
				-050	.3690	.1031	0446	0481	0611
				-150	3291	2053	,1307	1450	.1080
				.300	.1909	.1261	.1085	.1134	.0898
				520	.0214	.0214	.0357	.0662	.0013
				. 753	3613	4957	4806	4882	5028
				.900		4130	4744	4890	4657
ALPHA ( 2) =375	BETA	(1) =	-3.997	Z/BV X/CV	-158	.316	. 900	.840	925
				מסטי	.6433	. 5842	. 5462	. 5341	.4898
				.025	11961	1121	4162	6552	6569
				.050	1167	2454	4135	6111	6532
				.157	1097	2170	3835	5178	5784
				- 300	.0709	1238	2902	3009	4501
				. 520	1267	- 1537	2434	2477	2011
				.750	·· 4215	5600	5325	5603	5621
				.900		4905	5570	5375	5429
ALPHA ( 2) =408	BETA	( 2) =	.012	Z/BV X/CV	.158	.316	•600	.840	.925
		•		.000	. 71 66	6166	, 5489	.5646	.5524
				.025	.1249	.1007	0951	1322	1417
				.0 <i>5</i> 0	.2945	.0534	0813	0770	0906
				. 1 50	.2752	.1645	.0790	.0996	.0730
				• 300	.1518	.0799	.0571	.0647	.0477
				• 52!]	0130	0192	0108	.0257	0358
				750	3690	5108	4945	4971	5175
				•900		4368	4893	-,4974	4885
ALPHA ( 2) =381	BETA	(-3) =	4 .031	Z/BV X/CV	-1 58	.316	•600	840	925
				.000 -	6371	.5125	.4279	.4684	.4519
				.025	5066	.4267	.2973	.3147	.3478
				.050	51 71	.3996	.3334	.3206	-3065
				1 50	٠ 400.18	.3800	.2889	.2899	.2377
				300	.2638	.2219	.2244	.2218	1540
				• 520	.0953	.0966	.1012	.1292	.0010
				. 753	3764	4514	4501	4747	5183
				.900		3853	4230	4622	51 42

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DATE D1 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV29)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.843 BETA ( 1) = .003	Z/BV X/CV	.1 58	.316	. 600	.840	.925
	.000	7065	.5481	.4572	.4684	.4583
	.025	.0327	.0392	1280	1677	1752
	.050	.2711	0120	1148	1172	1159
	.150	.2069	.0977		.0503	.0289
	.300	.0869	.0238	.0053	-0148	0000
	529	0689	0703	0606	0256	0859
	750	3886	5435	-,5213	5257	5486
	ALC:	•	~ 4302	- 51 77	5220	5247

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.000 1.400

# ARC11-0141419 OTS+STRUT SRB-NOM MES-NOM VERTICAL

(REUV30) ( 19 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.	XMRF =	976.0000	IN. XT					ELV-IB =	.000	ET A-C8 =
LREF = 1290.3000 IN.	YMRF =	.0000	IN. YT					RUDDER =	.000	MACH =
BREF = 1290.3000 IN.	ZMRP =	499.0000						GIMBAL =	1.000	
SCALE = .0200		417.7 * 616.61.61								
SCALE - MEDIO										
SECTION ( 1) VERTICAL		DEF	ENDENT VAI	RIABLE CP						
ALFHA ( 1) = -4.224 BETA	(4) =	.006	Z/BV	.158	.316	. 600	.840	925		
MEITIN A 17 O - 41224 DEFA			X/CV							
			.000	.7789	.7223	6558	.6779	.6669		
			.025	.2185	.2388	.0131	0439	0529		
			.050	•3040	.1.647	.0252	.0128	.0021		
			.150	3838	.2575	.1898	.1971	.1643		
			.300	.2476	.1863	.1572	.1676			
			. 529	.0847	.0843	.0979	.1318	.0812		
			. 750	2882				3683		
			.900		3665	3491	3532	≈.3467		
ALPHA ( 2) =444 BETA	(1) = ~	3.997	Z/BV X/CV	.158	.316	.600	.840	.925		
			.000	.6798	.6117	.5912	.5486	.5384		
			.025	1133	0050	3284	4992	4873		
			.050		1428			5228		
			150		1468		4055	4189		
			.300			1830	2623	3337		
			520	0411	0750			1412		
			750		4197			4163		
			.900			4277				
were for - and DETA	( 0) =	O4 6	Z/BV	.158	.316	. 600	.840	.925		
ALPHA ( 2) =405 BETA	(2) -	1010	X/CV	. 12.30	.510		10.40			
				7175	6621	5901	. 5974	. 5984		
			.000	.7075		0165	+.0660			
			.025	.1219			0205			
			.050	1998			.1570	.1422		
		•,	.150	.3283	.2169	.1505		.1146		
			.300	.2030	.1448	1204	.1239			
			• 520	.0516	.0462	.0561	.0948	.0467		
			.750	2972		3614		- 3813		
			.900		3874	3614	3609	3662		
ALPHA ( 2) =36) BETA	(3) =	4.031	Z/BV X/CV	.1 58	.316	. ୧୯୯୨	.840	.925		
			מפט.	. 6765	.5456	.4865	. 5229	.5184		
			.025	.5192	.4743	3470	.3595			
						.3784	.3743			
			.050	.5394	.4447					
			-150	.4380	.3689	3319	.3483			
			.300	3085	.2639	.2791	.2907			
			5217	.1 563	1 562	.1833	·2233			
			. 750	2999	3292	3108	3228			
			.900		3185	2968	3177	3649		



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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 859

ARC11-014TA19 OTS+STRUT SRB-NON MPS-NON VERTICAL

(REUV30)

SECTION ( 1) VERTICAL

ALPHA (3) &	3.819	BETA	(1)	=	.009	Z/BV X/CV	1 58	-316	. 600	.840	.925
		- N				.000	. 669 5	- 5839	. 5004	.4972	4957
						.025	0369	.1012	0723	1139	
						.050	.1996		0617		
						•150	.2194	.1537	.0874	1028	.0960
						• <b>3</b> 00	.1356	.0812	.0596	.0642	.0523
					. •	- 520	0022	0123	.0007	.0381	0067
						. 75/3	3008	4192	3913	3881	4078
						.900		- 3989	3914		

### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV31) ( 19 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN.	XMRP = 976.0000 IN. XI YMRP = .0000 IN. XI ZMRP = 400.0000 IN. XI	T i		ELV-IB = RUCDER = GIMBAL =	.000 ELV-CB = .000 MACH = 2.000	.000
SCALE = .0200						
SECTION ( 1) VERTICAL	DEFENDENT	VARIABLE CP				
ALPHA ( 1) = -4.020 BETA	(1) = .006 Z/BV X/CV		16 .600 .840	.925		
	.00		717 .4280 .4588	.4415		
			74240634607			
	.09		086 - 3298 - 3363			
	.1:		29215231575			
			69816852042			
	. 52		98731872772			
	.7		75548893084			
	.9.		265033272616			
ALFHA ( 2) =288 BETA	(1) = -4.003 Z/BV X/CV		116 .000 .840	.925		
	.00		031 3062 2446	-2103		
	.02		175 - 9026 -1 0089			
	.09		3659024 -1.0079			
	-11		273 - 8900 - 8892		*	
	.30		612 - 7880 - 7958			
	• 56		41260646431			
	.79		63046853560			
	.9.		36432503194			
ALPHA (2) =279 BETA	(2) = .009 Z/BV	.158 .3	16 .600 .840	925		
	x/cV					
	.00	.49 <b>63</b> .3	435 -3301 -4050	.3945		
	.02	2511103	07943884380	4604		
	.0:	50 -09402	56837413057	3653		
	.1:	5006371	63719161452	1612		
	.30	2 בדנוצי- כור	49820062014	2228		
	• 52	20 - 2950 - 3	10232272678	3697		
	. 75	5026303	66343352711	1970		
	.9:	5	64926762344	1283		
ALPHA ( 2) =264 BETA			16 .600 .840	•925		
	X/CV					
	.0:		151 .1212 .1569	-1502		
	.ព្		845 .1221 .1441	1351		
	.05		674 .1310 .1184			
	.15			0341		
	.30			1621		
	• 52	2015652	03323002088	3843		

.750 -.2677 -.3311 -.5009 -.7914 -.6811

-.2332 -.2581 -.4086 -.3333





DATE DI MAY 75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 861

ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF VERTICAL

(REUV31)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.978 BETA ( 1)	= .000	Z/BV X/CV	-1 58	.316	.600	.840	.925
		.000	. 4621	.2686	.2731	.3339	- 3109
		.025	1965	3792	4001	4221	4497
		•050	.0083	3297	3480	3030	3760
		150	1305	2483	1581	1632	1952
		.300	2777	3165	1702	2292	2545
		. 520	3511	2605	3266	2963	4077
	ka	750	2538	2774	4459	2884	- 1952
		.900		2340	2395	2568	1187

ATILIAUD AOOY TO

# ARC11-014IA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV32) ( 19 OCT 74 )

# REFERENCE DATA

# PARAMETRIC DATA

LREF	=	1290 1 <b>29</b> 0	.0000 \$ .3000 1 .3000 1	٧.	ХИ <b>Й.Р</b> ҮМЙР ХИЙР	*		.0000	IN. XT IN. YT IN. ZT			•		ELV-IB = RUDDER = GIMBAL =	.000 .000 2.000	ELV-CB :	.000 1.100
SECT	ION	(. <u>1</u> )	VERTICA	L				DEFE	ENDENT VA	RIABLE CF			;				
ALPHA	( 1	) = -	-3.906	BETA.	(1)	<b>.</b>	000		Z/BV	.1 58	.316	. 600	.840	.925			
									XVCA								
									.000	7228	5833	.5575	.5703	. 5675			
									.025	1821	.0034	- 1503	1905	2365			
									.050	3631	.0461	1106	1133	1619			
									.150	2422	.1311	.0640	.17674	.0319			
									.300	-1103	.0468	.0432	.0152	0114			
									- 520	0519	0579	0703	0441	1293			
		•							.750	3466	6660	6810	6970	7074			
									.900		3646	6659	6883	6448			
ALPHA	( 2	2) =	255	BETA	(1)	= -4	.000		Z/BV X/CV	.158	.316	<b>.</b> eno	.840	.925			
									.000	. 6725	- 51 70	.4847	.4379	.4146			
									.025	1297	3546	5278	6848	8535			
									.050			5281					
									-150	0569	3140	5133	5509	6968			
									.300	0484	1881	4245	4595	4543			
									. 520			3335					
									. 750			6909					
									.900		4237	7118	6881	6824			
ALPHA	( 2	?) =	213	BETA	( 2)	Ξ.	009		Z/BV X/CV	.158	316	•600	.840	.925			
									.000	.7062	.5656	. 5.129	5733	.5115		•	
									.025	.1085	0127	1613	1932	2172			
									.050	.3256	.0384	1263	1226	1484			
									1 5/3	.2326	.1165	.0378	.0485	.0136			
									3/10	.1044	.0341	.0183	.0079	0197			
									- 520	+.0570	0732	0864	0545	1354			
									.750	3261	6444	6635	6745	6896			
									.900		3583	6474	6639	6366			
ALPHA	( 2	:) =	219	BETA	( 3)	= 4	.028		Z/BV X/CV	.1 58	.316	•600	.840	.925			
									.000	. 5966	4370	-3372	- 3662	3670			
									.025	- 5.189	3862	.2725	.2846	2961			
						-			.050	5031	.3654	-2955	791	·2360			
									.153	3624	.2860	-2395	.2296	.1635			
									300	.2180	.1811	1 633	.1376	:0 ens			
									. 520	.0529	.0227	.0048		1191			
									. 752	3710	5853			- 6962			
									.900			5701					



CATE DI MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 863

# ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF VERTICAL

(REUV32)

¢	FC	TI	ON	(	٠,	VEDT	TICAL

#### DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.981 BETA ( 1) = .000	Z/BV	-1 58	.316	.000	.840	.925
	X/CV					
	.000	. 6923	-5013	-41 54	. 4105	. 4258
	.025	-0710	0620	1984	2281	2457
	<b>.05</b> 0	.2719	0475	1773	1671	1720
	-150	.1736	.0000	0212	0086	0350
	300	.0399	0252	0389	0451	0693
	520	1179	1251	1279	0976	1778
	. 750	3393	6518	6734	6827	7041
	.900		3866	6569	6725	6614

ARC11-8141A19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV33) ( 19 OCT 74 )

#### REFERENCE DATA

PARAMETRIC DATA

SRE	F =	2690.0000 SQ.FT.	XMRP	=	976.0000 IN. XT	ELV-18 =	.000	ELV-OB =	.000
LRE	F =	1290.3000 IN.	YMRP	=	.0000 IN. YT	RUDDER =	.000	MACH =	1.250
BRE	F =	1290.3000 IN.	ZMRP	Ξ	400.0000 IN, ZT	GIMBAL =	2.000		
SCA	LE =	.0200							

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALFHA ( 1) = -4.044	BETA	(1)=	.003	Z/BV X/CV	.158	.316	600	.840	.925
1. 1. *		1.		.000	.7748	6501	. 6131	. 61 71	.6291
				.025	.2049	.0701	0598	1006	1193
				.050	3676	.0975	0452	0500	0658
				.150	.3282	-2022	.1293	.1456	.1116
				300	1973	.1241	-1054	.1122	.0923
				520	.0203	.0238	.0331	.0687	.0034
				.750	- 2985		4788	4837	4994
				.900			4725	-,4858	4623
ALPHA ( 2) =198	BETA	(1) =	-4.000	Z/BV	1 58	-316	. 600	.840	.925
				X/CV					
				.000	. 6341	.5641	.5375	.4954	.4801
				.025		2321		-,6580	6562
				.050	1102	2465			6545
				• 150	1186	- 2212		5171	5798
	•			.300	.0743	1192		3053	4559
				. 529	1277	1535	2456	2571	2051
				.751	3458	5556	5349	5659	5612
				19171		3656	5543	5377	5440
ALPHA ( 2) =162	BETA	(5) =	.009	Z/BV	.158	316	. සාග	.840	.925
±				X/CV					
				.000	נקנוק.	.6004	.5417	- 5362	-5520
				.025	-1173			1335	1447
				.050	.2881	11479		0755	0896
				.150	.2719	.1623	.0820		.0710
				.300	.1573	.0785	.0567	.0668	.0471
				520	0154		0097	.0256	0364
								.0256 4962	0364 5179
				• 520	0154	0184 5093	4936	4962	
ALFHA ( 2) =210	BETA	( 3) =	4.031	.520 .750 .900 Z/BV	0154	0184 5093	4936	4962	51 79
ALFHA ( 2) =210	BETA	( 3) =	4.031	.520 .750 .900 Z/BV X/CV	0154 3066	0184 5093 3415	4936 4894 .800	4962 4968 .849	5179 4886 -925
ALFHA ( 2) =210	BETA	( 3) =	4.031	.520 .750 .900 Z/BV X/CV .000	0154 3066 .158 .6303	0184 5093 3415 .316	4936 4894 .600	4962 4968 .840	5179 4886 .925
ALFHA ( 2) =210	BETA	(3) =	4.031	.520 .750 .900 Z/BV X/CV .000 .025	0154 3066 .158 .6303 .5040	0184 5093 3415 .316 .4961 .4113	4936 4894 .800 .4178 .2934	4962 4968 .840 .4375 .3182	5179 4886 -925 .4475 .34@J
ALFHA ( 2) =210	BETA	(3)=	4.031	.520 .750 .900 Z/BV X/CV .000	0154 3066 .158 .6303	0184 5093 3415 .316	4936 4894 .800 .4178 .2934	4962 4968 .840 .4375 .3182 .3184	5179 4886 -925 .4475 .3461 .3016
ALFHA (2) =210	BETA	(3)=	4.031	.520 .750 .900 Z/BV X/CV .000 .025	0154 3066 .158 .6303 .5040	0184 5093 3415 .316 .4961 .4113	4936 4894 .800 .4178 .2934	4962 4968 .840 .4375 .3182	5179 4886 -925 .4475 .34@J
ALFHA (2) =210	BETA	(3) =	4.031	.520 .750 .900 Z/BV X/CV .000 .025 .050	0154 3066 .158 .6303 .5040 .5147	0184 5393 3415 -316 4961 .4113 .3961	4936 4894 .600 .4178 .2934 .3258	4962 4968 .840 .4375 .3182 .3184	5179 4886 -925 .4475 .3461 .3016
ALFHA ( 2) =210	BETA	(3) =	4.031	.520 .750 .900 Z/BV X/CV .000 .025 .050 .150	0154 3066 .158 .6303 .5040 .5147 .3971	0184 5393 3415 -316 4961 .4113 .3961 .3144	4936 4894 .800 .4178 .2934 .3258 .2849	4962 4968 .840 .4375 .3182 .3184 .2900	5179 4886 925 4475 3460 3016 2371
ALPHA (2) =210	BETA	( <b>3)</b> =	4.031	.520 .750 .900 Z/BV X/CV .000 .025 .050 .150	0154 3066 .158 .6303 .5040 .5147 .3971 .2604	0184 5093 3415 .316 .4961 .4113 .3961 .3144 .2169	4936 4894 .600 .4178 .2934 .3258 .2849 .2225	4962 4968 .840 .4375 .3182 .3184 .2900 .2196	5179 4886 -925 .4475 .3460 .3016 .2371 .1523

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CATE O1 MAY 75

# TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

PAGE 865

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV33)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA (3) = 3.846 BETA (1) = .003	Z/BV X/CV	.1 58	.316	. 600	.840	.925
	.000	. 6970	. 5294	.4526	.4493	.4629
	.025	.0355	0244	1331	1700	1681
	.050	.2700	0138	1187	1111	1108
	1 50	-2048	.0997	.0267	.0523	.0294
	.300	.0861	.0257	.0052	.0145	0035
	. 520	0687	0705	0586	0231	0830
	. 750	3214	5406	5187	5211	5447
	.900		3565	5143	5178	5216

O TO TO THE TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TO THE TOTAL TOTAL

#### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV34) ( 19 CCT 74 )

REPERENCE DAT	(A				PARAMETRIC DATA					
SREF = 2690.0000 S0.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN.	XMRP = 976.0000 YMRP = .00000 ZMRP = 400.0000	IN. YT					ELV-IB = RUDDER = GIMBAL =	.000 .000 2.000	ELV-CB = MACH =	.000 1.400
SCALE = .D2DD										
SECTION ( 1) VERTICAL	DEP	ENDENT VAR	TABLE CP							
ALFHA ( 1) = ~3.981 BETA	(1) = .000	Z/BV X/CV	1 58	316	•600	.840	.925			
		.000	.7760	. וארנוא	-6516	.6528	.6667			
		.025	.2196	.1456	.0127	0434	0503	•		
		-0.50	-3103	1 591	.0278	.0129	.0072			
		.150	-3863	.2006	.1938	-2005	.1612			
		.300	-2512	.1868	.1618	.1731	-1571			

.0899

ALPHA ( 2) =231	BETA (1) = -4.000		-1 58	.516	. 600	.840	.925
		X/CV					

52:3

. 750

.900

X/CV					
.000	.6684	. 5917	5804	. 5414	.5297
.025	1152	1362	3239	4985	4885
•050	1222	1437	3249	4764	5210
1 53	0932	1452	2757	4057	4188
- 300	1 593	0832	1874	2494	3324
520	0418	0795	1575	1510	1397
. 753	3152	4297	4179	4396	4159
.900		~.3312	4269	4169	4198

.0824

.0993

-.2794 -.3657 -.3450 -.3426 -.3619

-.3498 -.3451 -.3469 -.3407

.1311 .0870

ALPHA	( 2) =231	BETA	(2) = .009	Z/BV X/CV	-158	.316	• 6010	.840	.925
				nnn	7024	6405	8024	Emil	50.54

.000	.7024	.6485	5824	. 5720	. 5951
.025	1039	.0943	0193	0665	0752
.050	1831	.0990	0053	0137	0209
-150	3221	.2143	.1475	.1561	-1341
• <b>3</b> 00	-2035	-1425	.1173	.1285	.1115
• 520	.01521	.0464	-0552	.0945	.0468
. 750	2884	3819	3631	3601	3814
. 900		3673	- 3635	3604	3664

ALPHA	(2) =	210	PETA	(3) =	4.028

Z/BV X/CV	1 58	-316	. 600	.840	.925
.000	.6637	.5324	.4750	.4849	5074
.025	• 5,199	.4558	-3415	.3590	.3987
.050	. 5273	43.58	.3720	.3658	.3655
1 507	.4276	.3657	.3247	.3391	-3943
• 300	3053	2583	.2718	.2832	.2328
. 520	.1480	-1504	.1758	.2157	.1037
, 750	3135	3345	3168	3291	3680
.900		3270	3033	-,3233	3699





CATE DI MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 867

# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF VERTICAL

(REUV34)

SECTION	(	) VERT	ECAL
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# DEPENDENT VARIABLE CP

ALPHA (3) = 3.930 BETA (1) = .003	Z/BV X/CV	.158	-316	. 600	.840	.925
	.000	.6595	5587	. 4919	.4719	. 4933
	.025	0284	.0228	0715	1149	1210
	.050	.1989	.0222	0548	0612	0729
	-150	.2180	-1533	.0853	•1004	.0934
	300	1320	.0774	.0555	.9648	.0516
	- 520	0061	0140	0009	.0341	~.0133
	.750	2905	4215	3954	3908	4102
	.900		3539	3956	3888	4013

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV35) [ 19 OCT 74 ]

### REFERENCE DATA

PARAMETRIC DATA

				· ·			
SRFF :	= 2690.0000 SQ.FT.	XMRF = 97	s.oooo in. XT	ELV-IB =	.000	ELV-CB =	.000
	= 1290.3000 TN.			RUCCER =	.000	MACH =	.900
		ZMRP = 400		GIMBAL =	2.000		

SCALE = .0200

SECTION ( 1) VERTICAL					DEFENDENT VARIABLE CP						
ALPHA (1)	= -4.308	BETA	(1) =	.009		Z/BV X/CV	.158	.316	. 600	.840	.925
						.000	. 5294	.3785	.4148	.4387	.4169
						.025	0577	2648	4297	4889	5517
						.050	.1413	2017	3595	3974	4574
						-150	0172	1200	1891	1894	2965
						-300	1624	1829	2084	2544	2685
						• 529	3005	3402	3536	3129	4089
						750	4464	6059	-1.1154	~.4800	3230
						.900		4879	5260	4260	2965
ALPHA ( 2)	=390	BETA	( i) =	-4.000		<b>Z</b> /BV X/CV	.158	.316	•600	.840	.925
						.000	.3819	.3018	-3045	.2474	.2163
						.025		7197	9062	-1.0426	-1.2421
						050			9127		
						150	2646	6157	9009	9075	-1.0066
						.300	3741		7917		
						. 5217	5481	5330	6418	7949	5992
	•					.750	5735	6827	9864	4818	4316
						.900		6065	5409	4100	3775
ALPHA (2)	=384	BETA	(5) =	.012		<b>Z/</b> BV X/CV	.158	.316	.600	.840	-925
						.000	.4919	.3364	.3134	.3517	.3710
						.025	1119	3176	4636	5010	5246
						.0 <i>5</i> 0	.0873	2723	4056	3991	4273
						-150	- 41694	1769	2294	2118	2026
						.300	- 2124	2585	2517	2657	2581
						. 5217	3482	3748	3900	3148	4952
						. 751	-,4309	6081	-1.0372	3804	2693
						.900		5209	5083	-,3497	2144
ALPHA ( 2)	=345	BETA	(3) =	4.025		2/8V X/CV	- 1 58	.316	.600	.840	-925
							3 70 0	2417	4404	7 .	.1464
						.000 .025	.3788 .2705	.2107	.1184 .0911	.1575 .0940	.0855
						.029	.2626	1453	.1016	.0809	.0169
							•				
						. 1 5.7	1131	.0713	.0284	.0169	0684
						- 300	0234	0292	0655	1135	2009 4200
						. 520	1912	2276	2714		
						. 750	4264		-1.0283		÷,€085
*						.900		4351	-,5537	-,6343	-,4879

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DATE DI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 869

# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV35)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA ( 3)	= 3.90	3 BETA (1	) =	.006	Z/BV X/CV	.1 58	.316	.600	.840	.925
					.000	. 4538	.2573	.2107	.3129	3,166
	* * *				.025	2066	4937	5216	4782	5018
					.050	0016	3389	4603	3657	4199
					-150	1448	2627	2899	1955	2275
					3(71)	2951	3311	2925	2649	2892
					. 520	4360	4200	3678	3346	4524
					. 753	4420	5434	6024	3882	2710
					.900		4267	3500	3552	2152

.

#### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV36) ( 19 OCT 74 )

#### REFERENCE DATA

FARAMETRIC DATA

	SREF =	: 2	690.0	ooo s	Q.FT.	XMRP	= 97	0000.8	IN. XT					ELV-IB =	.000	ELV-CB =	.000
	LREF =					YMRP			IN. YT					RUDDER =	.000	MACH =	1.100
						ZMRF			IN. ZT					GIMBAL =	2.000		
	BREF =				N.	ZMCF	- 4:10	. I . L.P.L.P.L.P.	114. 51					orrene -	£		
,	SCALE =		- [1	500													
										D D	_						
	SECTIO	3N (	1) VE	RTICA	L			DEPE	ENDENT VA	RIABLE CF					•		
												****	0.40	005			
	ALPHA (	1)	= -4	.008	BETA	(1):	.003		Z/BV	1 58	.316	• 600	.840	.925			
									X/CV								
							•		.000	. 71 78	. 5813	5495	.5608	. 561 7			
									.025	.1765	0029	1605	2022	2433			
									.050	.3641	.0380	1267	1334	1706			
									-150	-2357	.1237	.0514	.0562	.0244			
									•300	,1028	.0374			0182			
														1381			
									. 520	0584		0834					
									. 750	4499				7166			
									.900		4462	6788	- 6989	6548			
	ALPHA (	(2)	= -	.342	BETA	(1):	-4.000		Z/BV	1.58	.316	.euo	.840	.925			
									X/CV							S S	
									.000	. 5911	• <b>5</b> 089	.4738	. 4229	.4024		7 2	
									.925	1390	3672	5480	7066	8726		ORIGINAL OF POOR (	
									.050					8392		27	
									150					6999			
									300					4732		~ =	
																න `	
									520					3748			
									.753	4909				7820		$\mathbf{A}$	
									.900		5094	7400	7125	7088		, PAGE QUALII	
																IGINAL PAGE IS POOR QUALITY	
	ALPHA (	(2)	<b>=</b> -	.318	BETA	(2) :	: .012		Z/BV	1.58	-316	. ୧୯୯	.840	.925		ゼ艿	
									X/CV							• 02	
									.000	.7041	. 5653	-5053	-5139	- 51 71			
									.025	.1240				2184			
									.050	.3336		1259					
												.0423	.0569				
									1 50	.2232	.1148						
									.300	.0982	.0320	.0229		0240			
									-520	0570		0834					
									. 750	4297	6641	=⊹6656	6806	6956			
									. 955		4329	~.6485	6711	6431			
	ALPHA (	2)	= -	.417	BETA	(3) =	4.031		Z/BV	.158	.316	. 600	.849	.925			
									X/CV								
									1000	. 5948	.4352	-3328	.3563	3 58 5			
									.025	5003	.3800	.2687	.2742				
									.050	4979	.3620	2902	2663				
									.1 50	.3597	.2816	.2325	.2214				
									.300	-2133	.1798	1 5 5 1	.1261				
									- 520	.0477		0043		1323			
									7:0	4.67.0	C12 C2	~~~	~~~	74.00			

.750 -.4539 -.6063 -.6281 -.6666 -.7129

-.4475 -.5845 -.6397 -.6968



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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-D14 )

# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV36)

SECTION ( 1) VERTICAL

DEFENDENT VARIABLE CP

ALPHA ( 3) = 3.717 BETA ( 1) = .000	Z/BV X/CV	.1 58	-316	.600	.840	.925
	.000	.6695	. 4838	.3998	.3986	.4075
	.025	.0638	0893	2279	2471	2732
	-050	.2559	0752	2026	1833	2061
	-150	.1474	.0308	0433	0261	0646
	.300	.0090	0480	0598	0704	0954
	. 520	1470	1519	1511	1273	2106
	. 750	4725	7154	7072	7229	7435
	.900		4905	~.6934	7101	7000

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# (REUV37) ( 19 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

.000 .000 ELV-CB = ELV-IB = 976.0000 IN. XT \$REF # 2690.0000 SQ.FT. 1.250 MACH = RUDDER = .000 TY WI CCCO. LREF = 1290.3000 IN. GIMBAL = 2.000 ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

SCALE = .0200	Zerki- a Atteri								
Jenez s								•	
SECTION ( 1) VERTICAL		DEFENDENT VAR	TABLE CP						
ALPHA ( 1) = -4.149 BETA	(1) = .006	Z/BV X/CV	.158	.316	.00	.840	.925		
		.000	.7718	.6487	.6117	. 61 55	. 6268		
		.025	.2074	.0675	0659	1042	1176		
		.050	3673	.1039	0473	0567	0697		
		150	.3249	.2007	.1244	.1442	.1121		
		.300	.1881	.1246	.1008	.1071	.0881		
		. 520	.0176	.0233	.0299	.0642	0004		
		. 750	3636	4988	4874	4911	5368		
		.900		3915	4893	4922	4690		
ALPHA ( 2) =414 BETA	(1) = -4.003	<b>Z/B</b> V X/CV	.158	.316	. 600	.840	.925	•	
tara da la companya d		.000	.6337	. 5663	.5396	.4975	. 48 59		
		.025	0922	23.19	4085	6595	6566		
		.050	1094	2460			6551		
		.150	1115	2237	3784	<b>~.518</b> ₽	5791		
		.300	.0752	1193	2928	3018	4542		
		. 520	1284	1535	2439	2441	1947		
		. 750	3837	5567		5647			
		.900		3982	5552	5365	5425		
ALPHA ( 2) =459 BETA	(2) = .009	<b>Z/</b> BV ×/CV	.158	.316	600	.849	.925		
		.000	.7396	. 6023	5449	54015	.5518		
		.025	1202	.0253	0912	1311	1457		
		.050	.2949	.0515	0810	0901	0848		
		.150	.2737	.1622	.0810	.1018	.0749		
		.300	1 520	.0802	.0581	.0685	.0467		
		. 520	0168	-,(3194	0088	.0252	0342		
		. 750	-,3621	5092	4940	4965	5174		
		.900		4005	4893	4960	4878		
ALPHA ( 2) =468 BETA	(3) = 4.028	Z/BV X/CV	1 58	.316	. 600	.840	.925		
		.000	6364	.5029	.4211	.4424	.4518		
		.025	-5103	.4186	£885.	.3282	.3517		
		.050	-5198	. 4000	.3341	.3248	3050		
		-1 50	3989	.3167	.2869	.2923	.2429		
		300	.2648	.2201	,2238	.2235	.1572		
		520	.1009	.0971	1050	1343	.0055		
		753	3790	4530		4714			
		,900	. 5 , 50			4586			
		1 300		, 50 7 1		. , , , , ,			



PAGE 873

ARC11-014IA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV37)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.864 BETA	( 1) = .	.003	Z/BV X/CV	-1 58	.316	.600	.840	.925
				.000	. 6975	. 5283	.4499	.4396	. 4559
				.025	.0287	0225	~.1358	1731	1734
				-050	.2716	0176	1179	1176	1198
				-150	.2057	0952	.0235	.0454	.0253
				300	.0828	.0232	.0019	.0094	0089
				. 520	0694	0726	0644	0296	0877
				. 751	3671	5479	5270	5292	5517
				000		- 3000	- 5220	5254	- 5276

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# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV38) ( 19 OCT 74 ) .

#### REFERENCE DATA

#### PARAMETRIC DATA

	ACI EXCINCE DA	•									5 V 55	- 000	
SREF =	2690.0000 SQ.FT.	XMRP =	976.0000	N. XT					ı V-IB =	.000	ELV-08 Mach	= .000 = 1.400	
LREF =	1290.3000 IN.	YMRP =	.0000						RUDDER =	2.000 000.s	MACI	. 1.40M	
BREF =	1290.3000 IN.	ZMRP ∓	400.0000	IN. ZT					GIMBAL =	C. CELLS			
SCALE =	.0200												
SECTION	( 1) VERTICAL	· · · · · · · · · · · · · · · · · · ·	CEPE	NDENT VAR	TABLE CP								
ALPHA ( S	) = -4.155 BETA	(1) =	.003	Z/BV X/CV	.158	.316	.600	.840	.925				
				.000	.7734	.6992	. 6520	. 6496	. 6625				
				.025	.2221	.1417	.0157	0403	0460				

.2971

.3820

.2466

.0847

-.2757 -.3687

	.900	3534	3472	3518	3450
ALPHA ( 2) =387 BETA ( 1) = -4.000	Z/B∀ . X/CV	158 -316	.609	.840	.925
	.000	.5926 .11771359			

.050

.150

.300

. 529

.753

-.1265 -.1443 -.3245 -.4782 -.5219 .050 -.0974 -.1420 -.2757 -.4069 -.4187 .157 .1621 -.0833 -.1835 -.2521 -.3308 .300 -.0414 -.0775 -.1559 -.1506 -.1353 . 520 -.3142 -.4189 -.4161 -.4413 -.4169 , 750

.0043

.1981

.1702

.1274

.0206

.1890

.1599

.0968 -.3492 -.3470

.1583

.2553

.1877

.0809

.0063

.1626

.1516

.0828

-.3663

-.3241 -.4258 -.4159 -.4186 900 .925 Z/BV .316 . 600 .840 ALPHA ( 2) = -.318 BETA ( 2) = .009 .158 X/CV

> . 5961 .000 .7024 .6489 .5866 .5720 -.0765 -.0671 .025 .1184 .0945 -.0232 -.0230 .050 .2050 .0985 -.0111 -.0158 .1565 .13EU .2163 .1519 .150 .3255 .1136 .300 .2038 .1437 .1194 .1268 .0463 .0940 .0487 .0557 . 520 .0497

> -.2879 -.3805 -.3630 -.3675 -.3809 . 750 -.3620 -,3611 -.3663 -.3700 .900

.925 .600 .840 Z/BV .158 .316 ALPHA ( 2) = -.354 BETA ( 3) = 4.031 X/CV

.4802 4949 . 51 68 .000 .6722 .5372 .3604 .3990 .025 .5113 .4603 .3427 .3712 .050 . 5291 .4393 .3809 .3737 .3305 .3458 .3087 .150 .4282 .3679 .2388 .2601 .2753 .2920 .300 .3113 .1098 .1526 .1816 .2209 . 520 .1525

-.3004 -.3287 -.3115 -.3227 -.3630 . 750 -.3211 -.2982 -.3177 -.3641 ,900



DATE (	11 M	MY 1	75
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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM VERTICAL

(REUV38)

SECTIO	N (1)	VERTICA	L				DEPE	ENDENT VAL					
ALPHA (	3) =	3.939	BETA	(1)	=	.000		<b>Z</b> /BV X/CV	1 58	-316	.000	.840	.925
								.000	• 6655	- 5638	.4966	.4772	4964
								.025	0240	.0231	0628	1175	
								-050	-2082	.0279	0586	0626	0662
								-150	-2196	.1550	.0892	.1067	.0977
								.300	-1348	.0809	.0576	.0683	.0567
								520	0071	0105	.0001	.0398	0056
								.751	2875	4158	3892	3845	4048
								•900		3497	3888	3832	3955

CONTROL OF THE PARTY OF THE PAR

-.3497 -.3888 -.3832 -.3955

PAGE 876

ARC11-014TA19 OTS SRB-QFF MPS-QFF VERTICAL

(REUV39) ( 19 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF	= .	2690.0	2000	SQ.FT.	XMRP	= 976	6.0000	IN. XT					ELV-IB =	: .009	EL V-CB		.000
LREF					YMRP	Ξ	.0000	IN. YT					RUDDER =	.000	MACH	=	.900
BREF					ZMRP	= 400	0.0000	IN. ZT					GIMBAL :	1.000			
SCALE			1200														
SECTI	CN	(1)V	ERTIC	AL.			DEP	ENDENT V	ARIABLE CF	•							
ALPHA	( 1	.) = -1	8.139	BETA	(1) =	.000		<b>2</b> /BV X/CV	.1 58	.316	.600	.840	.925				
								.000	.5596	.5138	.5344	. 5397	-5190				
						•		.025	0356	2117	3821	4535	4967				
								.050	.2140	1295	3146	3570	4192				
								150	.0655	.0000	1089	1337	1340				
								.300	0634	1085	1482	1825	1976				
								. 520	2258	~.2768	2953	2489	3310				
								.75	2770	4240	5325	3431	2475				
								.90	)	2835	3870	3083	1873				
ALPHA	( %	}à = -	4.032	BETA	(1)=	.000		Z/BV X/CV	.158	.316	. භාග	.840	.925				
								.000	.5140	.4167	.4276	.4780	.4552	•			
								.025	0361	2450	4977	4555	4851				
* -								.050					3869				
								• 1 50	0002	.0000	1476	1456	1484				
								.300	1337	1675	1661	1988	2147				
								. 520					3521	•			
								.75					2079				
								.900	)	2623	3288	2513	1422				
AL PELE	, ,		- 220	DETA	(4) -	-4.003		Z/BV	.158	.316	. 600	.840	.925				
ALTOA	•	,, -	220	UCIA	, -	4.000		X/CV		.0.0							
								.000	3881	.3318	.3192	.2474	.2239				
								.025					-1.0417				
				•				.050					-1.0258				
•								1 5/1					-1.0246				
								300					8655				
								. 529					4297				
								.750					2113				
								.900					1366				
								.510	,	IEGES	•2521	12300					
ALPHA	( 3	3) =	249	BETA	( 2) =	.012		Z/BV X/CV	1 58	.316	.600	.840	.925				
								.000		.3202	.3653						
								.025	1161	3018	3875	4489	4824				
								.050	.0822	2572	3183	3073	3847				
								. 1 5/3	0705	10000	1494	1 520	1715				
								.300	2083	2373	1658	2051	2310				
								. 520	2785	2917	3181	2776	3759				
								7.00		****	4 ~~ 3 7	0.700.0	0047				

.750 -.2498 -.3233 -.4607 -.2786 -.2013

-.2389 -.2655 -.2280 -.1217

.900



# TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

							AR	11-0141A19 OTS	9	RB-OFF M	irs-ûff /	ERTICAL		(REUV39)
BECTI	ÓN (	1)	VERTICA	L				DEPENDENT VAR	IABLE CF	1				
ALPHA	( 3)	=	261	BETA	( 3	) =	4.028	Z/BV X/CV	1 58	.316	. 200	.840	.925	
								.000	.3737	.2166	.1193	.1866	.1506	
								.025	.2726		.1333		.1225	
								.050	.2646	.1564	.1353	.1213	.0566	
								.150	.1183	.0000	.0672	.0470	0356	
								.300	0033	0073	0289	0702	1626	
								.520		2066	2329	2127	3854	•
								.750				6037	6212	
								.900				4404		
ALPHA	(-4)	ŧ	4.032	BETA	<b>( 1</b>	) =	.003	<b>Z/</b> BV X/CV	.158	.316	. භාග	.840	.925	
								.000	.4674	.2947	.2851	.3395	.3160	
								.025				4251		
								.050				2956		
								.150				1656		
								.300				2291		
								.520				3/119		
								.750				2884		
							•	.900				2428		
ALPHA	(-5)	=	7.920	BETA	Ç	) =	.003	Z/BV X/CV	.158	.316	. 600	.840	.925	
								.000	.2965	.2228	2614	.3028	.2578	
								.025				4223	4524	
								.050	0794	2446	32!19	2934	3728	
								150	1391	.0000	1854	1769	2118	
								.300				2409		
								. 520				3143		
								75.1				3888		

-.2225 -.2124 -.3011 -.1344

/BEIIVEO

ARC11-014TA19 OTS

SEB-OFF MPS-OFF VERTICAL

(REUV4D) ( 19 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

.000 D\_V-IB = .000 SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT RUDDER = ,000 MACH = 1.100 LREF = 1290.3000 IN. YMRP = .0000 IN. YT GIMBAL = 1.000 ZMRP = 400.0000 IN. 2T BREF = 1290.3000 IN.

SCALE = .0200

SECTION ( 1) VERTICAL

#### DEPENDENT VARIABLE CE

SECTION ( 1) VERTICAL				DEPENDENT VAI	RIABLE CP				
ALPHA ( 1) = -7.992	BETA	(1) =	.003	Z/BV	.158	.316	. 600	.840	.925
				XXCV					
				.000	.7742	.6696	.6493	.6769	.6539
				.025	.2517	.0446	0979	1539	~.2299
				.050	.4270	.0989	0557	-,0955	1633
				150	.2955	.0000	.1232	.1138	.0879
				.300	1620	.1132	.0989	.0518	.0354
				- 520	.0097	.0000	0207	0002	0809
				.750	3373	6385	- 6508	6680	6715
				.900		3666	6402	6567	6001
ALPHA ( 2) = -4.080	BETA	(1) =	.003	Z/BV	.1 58	.316	, em	.840	.925
				X/CV					
				.000	7369	60149	.5748	.5974	.5809
	$\tau_{i}=-\tau$			.025	.217.13	.0176	1408	1778	2327
				.051	.3812	.0618	1043	1065	1528
				.153	2552	.0000	.0808	.0807	.0469
				.300	.1236	0714	.0566	.0241	.0018
				. 520	0365	- 11449	0555	0349	1176
*.				757	3530	6546	6648	6836	6920
				.900		3713	6509	6734	6284
ALPHA ( 3) =225	BETA	(1)=	-4.000	Z/BV	1 58	-316	.000	.849	.925
				X/CV					
				.000	· 6027	5280	.4857	.4216	.4118
				.025	1347	3491	5419	7317	8731
				.050	1649	3623	5363	7297	- 8367
				.150	0268	.0000	5129	5564	7403
				-300	0570	1831	4180	4279	- 4228
				. 520	2387	2388	3064	3980	3209
				.750	4202	6404	-,7174	7218	7583
				.900		4513	7285	7098	5941
ALPHA ( 3) =159	BETA	(5) =	.012	<b>Z/</b> BV X/CV	.158	316	. සාග	.840	.925
					77770	5007	E1300	5404	E1103
				.000	. 7039	.5667	- 5022	.5191	- 5393 - 2379
				.025	.1178	0236	- 1645	1982	
				.050	.3232	.0121	1333	1230	1683
				.150	.21€0	.0000	.0318	.0471	.0034
				.300	.0835	.0267	.0119	-,0067	0337
				. 520	0737	0837	0928	0699	1527
				.750	3666	6681	6767	6936	7086
				.900		3867	6594	6833	6557

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ARC11-0141A19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV40)

ALPHA (3) =312 BETA (3) = 4.028  Z/BV	SECTION ( 1)	VERTICA	L.			DEPENDENT VAR	TABLE CP				
ALPHA (4) = 3.885 BETA (1) = .000 Z/BV .158 .316 .600 .840 .925 .2667 .09300 .0930 .09300 .09300 .09300 .09300 .09300 .09300 .09300 .09300 .09300 .09300 .09	ALPHA ( 3) =	312	BETA	( 3)	= 4.028		.158	.316	. 600	.840	.925
ALPHA (4) = 3.885 BETA (1) = .000						.000	. 6081	.4574	.3521	.3972	.3751
ALPHA (4) = 3.885 BETA (1) = .000						.025	. 5020	.3797	.2674	.2726	.2751
300   .2164   .1789   .1592   .1312   .0551						.050	. 4954	.3@13	.2876	.2677	.2295
. 520 .0513 .0195 .0062 .02661228 .75036285781614865487016 .9003853571762816802 .9003853571762816802 .900 .925 .900 .6738 .4920 .4095 .4165 .4082 .025 .06650822220924852667 .090 .26130698196417301900 .190 .1455 .0000 .0461 .02100561 .300 .00950493058606450936 .300 .00950493058606450936 .52014681517 -146012392074 .75039836969705071917399 .9004224689670826957 .900 .4224689670826957 .900 .6379 .4316 .3003 .3008 .3131 .025 .04951351291932113193 .055 .04951351291932113193 .055 .04951355146515451544 .52022442244218318442674 .75024497395744575517806						. 1 50	.3557	.0000	.2370	.2248	
ALPHA (4) = 3.885 BETA (1) = .000 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6738 .4920 .4095 .4165 .4082 .025 .0665 .0822 .2209 .2485 .2667 .090 .2613 .0698 .1964 .1730 .1900 .150 .1455 .0000 .0461 .0210 .0561 .300 .0095 .0468 .1050 .0095 .0561 .0095 .0561 .0936 .0						.300	.2164	.1789	.1592	.1312	.0551
ALPHA (4) = 3.885 BETA (1) = .000						. 52!)	.0513	.0195	.0062	.0266	1228
ALPHA (4) = 3.885 BETA (1) = .000				-		. 750	3628	5781	6148	6548	7016
X/CV  .000						.900		3853	5717	~.6281	6802
ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .000 .840 .925  X/CV  .050 .2617 .0618 .3222209 .24852667 .050 .26130698196417301900 .150 .1455 .0000046102100561 .300 .00950493058606450936 .52014681517148012392074 .75039836969705071917399 .900	ALPHA ( 4) =	3.885	BETA	(1)	= .000		.158	.316	. භාග	.849	.925
ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .000 .840 .925  X/CV  .050 .6379 .4316 .3003 .3003 .3008 .3131 .055 .04951351291932113193 .057 .0486 .0000046102100561 .300 .0005 .6379 .4316 .3003 .3008 .3131 .055 .04951351291932113193 .050 .0518 .1038 .0000131010991203 .300 .06181365145314161584 .52022442214218318442674 .750344075517806						.000	. 6738	4920	.4095	. 4165	.4082
ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .000 .840 .925  X/CV  .000 .6379 .4316 .3003 .3003 .3008 .3131 .025 .049513512919 .32113193 .091 .23421156269625492472 .150 .1038 .0000131010991203 .300 .000 .6379 .436 .3003 .3008 .3131 .025 .049513512919 .32113193 .091 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806									2209	~.2485	2667
ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .000 .840 .925  X/CV  .000 .6379 .4316 .3003 .3008 .3131 .025 .049513512919 .32113193 .090 .23421156269625492472 .150 .1038 .0000131010991203 .300 .06181365145314161584 .52022442214218318442674 .750344575517806								0698	1964	1730	1900
ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .600 .840 .925  X/CV .000 .6379 .4316 .3003 .3008 .3131 .025 .04951351291932113193 .090 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806								.0000	0461	0210	0561
.52014681517148012392074 .75039836969705071917399 .9004224689670826957 ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6379 .4316 .3003 .3008 .3131 .025 .04951351291932113193 .090 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806							.0095	0493	0586	0645	0936
ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6379 .4316 .3003 .3008 .3131 .025 .04951351291932113193 .095 .1950 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806							1468	1517	1480	1239	2074
ALPHA (5) = 8.073 BETA (1) = .000 Z/BV .158 .316 .600 .840 .925 X/CV .000 .6379 .4316 .3003 .3008 .3131 .025 .04951351291932113193 .090 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806						. 750	3983	6969	7050	7191	
X/CV .000 .6379 .4316 .3003 .3008 .3131 .025 .04951351291932113193 .090 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806						.909	•	4224	6896	7082	6957
.000 .6379 .4316 .3033 .3008 .3131 .025 .04951351291932113193 .090 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806	ALPHA ( 5) =	8.073	BETA	( 1)	= .000		.158	.316	.600	.840	.925
.025 .04951351291932113193 .0190 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806						_	. 6379	.4316	3003	.3008	.3131
.090 .23421156269625492472 .150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806										3211	3193
.150 .1038 .0000131010991203 .30006181365145314161584 .52022442214218318442674 .75044907395744575517806									2696	-,2549	2472
.30006181365145314161584 .52022442214218318442674 .75044907395744575517806								.0000	1310	1099	1203
.5202244214218318442674 .75044907395744575517806									1453	1416	1584
.75044907395744575517806										1844	2674
										7551	7896
						.900			7395	7405	7463

.

.000 1.250

ARC11-014TA19 OTS

SRB-OFF MES-OFF VERTICAL

(REUV41) ( 19 OCT 74 )

#### REFERENCE DATA

# PARAMETRIC DATA

SREF = 2690.0000 SQ LREF = 1290.3000 IN BREF = 1290.3000 IN	. YMRP =	976.0000 0000 400.0000	IN. YT					ELV-T8 =	.000	ELV-CB = . MACH = 1.
SCALE = .0200	· Engl	400 (CREE)	IN. 21					GIMBAL =	1.000	
SECTION ( 1) VERTICAL		DEF	ENDENT V	ARTABLE C	P				. ·	
ALFHA ( 1) = -8.232	BETA (1) = -	006	Z/BV X/CV	.158	.316	. 600	.840	.925		
			.000	.8352	.7339	.00	.7198	.7155		
			.025	2782		0229				
	4		.050	.4451		0023				
			.150	.3849			.1976			
			.300	.2459	1805			.1427		
			• 520	.0756	7870،	.0855	-1100	.0446		
			.750	3091	4703	4617	4688	4782		
			•900		3317	4552	4699	4309		
ALPHA ( 2) = -4.098 E	BETA (1) = -	.006	Z/BV X/CV	1 58	.316	•600	-840	925		
			.000	.7875	.6676	.6219	.6368	6358		0.0
			.025	.2156		0571	1013	1020		<u>ک</u> ک
			•950	.3785	.1119	0408				<u>به</u> (رُزُ
			-150	-3372	.0000	.1311	.1477	1183		8 2
			•300	-2009	.1276	.1114	.1172	.0981		A K
			. 520	.0273	.0244	.0387	.0728	.0081		
			.750	3062	4912	4765	4802	4946		<u>وبر</u>
	•		.900		3340	4692	4812	4567		J'A(
ALFHA ( 3) =243 B	IETA (1) = -4	.000	Z/BV X/CV	.158	.316	.600	.840	.925	•	ORIGINAL PAGE IS OF POOR QUALITY
			.000	.6552	-5856	-5436	.4948	4921		$\sim \infty$
			.025	0983			6512			
			.1757	1121			6306			
			. 1 50	0517			5187			
			• 300	.0749			2732			
			520	1265	1487	2195	2256	1808		
	,		. 759	3@1	5637	5421	5592	5587		
			.900		3824	5571	5430	5422		
ALPHA ( 3) =171 8	ETA (2) =	.012	Z/BV X/CV	-1 58	-316	.600	.840	.925		
			.000	-7180	. 6085	.5462	. 5511	-5522		
			025	1245	.0298	0941	1366	1461		
			.050	-3009	.0540	0845	0903	0879		
			• 1 50	.2743	.0000	.0772	-0906	.0 69 5		
			-300	-1 528	.0788	.0545	.0631	.0447	•	
	•		• 52!)	0149	0242	0114	-0233	0381		
			. 750	3240	5139		4994	5195		
			.900		3526	4931	4995	4999		



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ARC11-014TA19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV41)

SECTION ( 1) VERTICAL	DEPENDENT VA	RIABLE CF				
ALPHA (3) =171 BETA (3) = 4.025	Z/BV X/CV	.158	.316	• 600	.840	.925
	.000	. 6427	.5118	. 4238	.4632	.4542
	.025	.4795	.3952	.2709	.3244	.3258
	.050	+ 5021	.3830	.3118	.3100	.2919
	-150	.3918	.0000	.2726	.2804	.2297
	.300	.2597	-2156	-2153	-2130	.1452
	. 520	.0866	.0893	.0951	.1221	0069
	.750	3244	4567	4572	4823	5261
	.900		3415	4316	4700	5219
ALPHA (4) = 7.860 BETA (1) =003	Z/BV X/CV	.1 58	.316	. නග	-840	.925
	.000	. 6891	.5056	.3823	.3714	.3725
	.025	.0631	0391	1561	2020	2139
	.050	.2804	0315	1393	1532	1 532
	-1 53	1909	.0000	0196	0016	0219
	300	.0534	+.0077	0357	0343	0560
	.520	1072	1035	0997	0720	1328
	.753	3834	5696	5476	5537	5787
	.900		4090	5411	5457	55917

DATE DI MAY 75

ARC11-0141A19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV42) ( 19 CCT 74 )

PARAMETRIC DATA .

#### REFERENCE DATA

SECTION ( 1) VERTICAL

#### DEPENDENT VARIABLE CP

SECTION ( 1) VERTICAL	DE	EPENDENT VAR	IABLE CP				
ALPHA ( 1) = -4.059 BETA	(1) = .000	Z/BV X/CV	.1 58	.316	.609	.840	.925
		.090	. 78 60	.7224	.6613	.6745	.6729
		.025	.2289	.15.19	.0192	0423	0555
		.050	.3192	.1743	.0187	.0188	0093
		.150	.3927	.0000	.1942	.2011	.1767
		300	2547	1905	.1670	.1729	.1580
		520	.0931	.0842	.1023	.1351	.0882
		,750	2810	3622	3401	3394	3576
		.900		3532	3399	3438	3361
ALPHA ( 2) =183 BETA	(1) = -3.997	Z/BV X/CV	.158	.316	.600	.840	.925
		.000	.6793	.6194	. 58 58	. 5438	.5407
		.025	1031	1222	3210	4801	4873
		.050	1078	1289	3226	4955	5190
		.150	0602	בוביכוני.	2669	3984	4135
	·	.300	.1599	0629	1649	2469	3217
		. 520	0368	0690	1408	1244	1099
		.750	3171	4197	4121	4286	4068
		.900		3659	4198	4119	4080
ALPHA ( 2) =195 BETA	(2) = .012	Z/BV X/CV	.1 58	.316	.600	.840	.925
		.000	. 6996	6563	. 5873	5896	. 5944
		.025	.1270	.0887	0323	0772	0979
		.050	-2119	.0977	0187	0323	0379
		.150	3211	.0000	.1423	.1529	.1322
		.300	.2001	.1440	1153	.1236	.1092
		. 520	.0501	.0455	.0560	.0880	.0438
		. 750	2867	3840	3652	-,3613	3829
		900		3616	3646	3629	3672
ALPHA ( 2) = ,027 BETA	(3) = 4.028	Z/BV X/CV	.1 58	.316	. ເເນ	.840	.925
		.000	. 6662	. 5463	.4777	. 5187	.5122
		.025	. 4843	.4398	3182	.3343	.3758
		.0.50	5137	.4219	3594	.3553	.3563
		.1 50	41 70	.0000	.3137	.3293	.2975
		.300	3027	.2531	.2624	.2753	.2296
		.520	.1468	.1475	.1712	.2117	.1015
		. 750	2976	3370	3183	3277	3683
		.900		3236	3054	3221	3694
		1000					



ARC11-014TA19 QTS

SRB-OFF MPS-OFF VERTICAL

(REUV42)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3,924	BETA	(1)	=	.003	Z/BV X/CV	.158	.316	.600	.849	.925
						.000	.6566	. 5759	.4963	.4992	• 50 60
						.025	0220	.0296	0645	1082	1153
						.050	.2112	.0290	0548	0598	0584
						-1 50	.2181	.0000	.0867	.1061	.0946
						•300	.1357	.0811	.0636	.0711	-0627
						- 520	0001	0058	.0065	.0456	0020
						.750	2859	4123	3968	3823	4945
						.900		3423	3838	3807	3947
ALPHA ( 4) =	7.809	BETA	(1)	=	.003	Z/8V	.158	.316	. 600	.840	.925
						X/CV	2070	5700			44.45
						.000	.6676	5382	.4157	-4141	.4142
						-025	•0530	.0391	!!??!!	1189	1258
						•0 <i>5</i> 0	.2564	.0408	0644	0697	0091
						-150	.2430	-0000	.0530	.0673	.0516
						.300	.1107	.0481	.0265	.0321	.0217
						. 520	0369	0421	0275	.0049	0352
						. 750	3125	4242	3992	3992	4208
						900	3.23	3743	3925	3936	41 51

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ARC11-014TA19 OTS SRB-NOM MPS-OFF VERTICAL

(REUV43) ( 19 CCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.	XMRP = 976.0000 IN. XT			ELV-IB =	.000	ELV-CB =	.000
LREF = 1290.3000 IN.	YMRP = .0000 IN. YT			RUDDER =	.000	MACH =	.900
	ZMRP = 400.0000-IN. ZT			GINBAL =	1.000		
BREF = 1290.3000 IN	ZMCP & ADDI-DUCKI-119, 21					-	
SCALE - LUZUU							
SECTION ( 1) VERTICAL	DEPENDENT VAI	RIABLE CP					
SECTION ( TANKITCHE	54 21327	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
ALPHA ( 1) = -8.133 BETA	(1) = .003 Z/BV	.158 .31	6 .600	.840 .925			
ACTUAL 17 - 0.1133 SCIA	X/CV						
	.000	.5839 .50	25 .5036	.5403 .4985			
	.025	.034523	043681	44715384			
	.050	.214812	683085	37554721			
	.153			13621559			
	.300	081309	891455	19392232			
	.520	236226	72 - 2939	26253621			
	.750	355146	927452	54655271			
	.900	34	37 -,4279	47184533			
ALPHA ( 2) = -4.002 BETA	(1) = .003 Z/8V	.158 .31	e .eoo	.840 .925			
•	x/cv						
	.000	,5282 .41					
	.025			46034929			
	.050			35423958			
	.150			15811551			
	.300			20802167			
	. 520			26543595			
	. 75.1			30882264			
	.909	27	823736	25901540			
ALPHA ( 3) =342 BETA		.158 .31	6 .600	.840 .925		÷	
	X/CV						
	.000	.3793 .32					
	.025			9784 -1.1229			
	.050			9639 -1.0965			
	.151			8461 -1.0743			
	.300			73858804			
	.520			59434015			
	.750			30002210			
	•900	28	302385	24581592			
	7.00	450 74	c 63/3	0.40 005			
ALPHA ( 3) =357 BETA		.1 58 .31	6 -600	.840 .925			
	X/CV	40.40	10 3/05	#10D 3047			
	000.	.4840 .31					
	.025			46745086			
	.051			34224083			
	.150			16671842			
	.300			22072506			
	- 520			29603998	*		
	. 750			30632241			
		26	982904	26371464			



								AR	C11-014TA1	9 OTS		SRB-NOM	MPS-QFF	VERTICAL		(REUV43)	
SECT	ION (	1)\	ERTICA	ι <b>.</b>					DEPENDEN	T VAR	TABLE C	F					
ALPHA	( 3)	=	288	BETA	(	3)	ŧ	4.022	Z/B X/C		. 1 58	.316	. 600	.840	.925		
										000	.3776	.2288	.1246	.1908	-1535		
										025	.2678						
										993	.2644						
										1 50	.1137				0422		
															1769		
					•										3919		
									.•	750	2690	3564	4812	- 6400	5665		
									•	900					3130		
ALPHA	(4)	=	3.924	BETA	ť	1)	=	.000	Z/B		.158	.316	.600	.840	.925		
									.!	000	.3655	.2807	.3228	.3811	-3191		$\circ$
									!	125		3907					Of C
									.!	150	0258	2268	- 3/394	3016	3739		H (
									•1		1139			1680			POOR (
								•	•	מנע	2294	2194	1801	2350	2656		9 %
									• 5			3018					~ ₽ ⊭
									•			2869					ညေး
									.9	00				2563			)UA
LFHA	( 5) :	=	7.962	BETA		1)	=	.000	Z/B\ X/C\		.158	.316	.600	.840	•925		QUALITY
									.0	00	-3134	-2319	.2703	3082	.2715		₩ 5.
									.0	25 .		3701					
									.0	50	0742	2302	3231	29/15	3564		
								•	•1	<b>5</b> .) ·	1275	.0000	1829	1696	2012		
										00	2352	-:2497	1927	2327	-:2642		
									. 5	29	2943	3051	3336	- 7788	- 4252		
									. 7	50 -	- 2496	2671	4216	- 3202	1008		
					,					30				2387			
											+		-13.1	. 2501	1001		

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FAGE 886

ARC11-014TA19 OTS

SRB-NOM MPS-OFF VERTICAL

(REUV44) ( 19 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

LREF =	2690.0000 1290.3009 1290.30% .0200	IN.	XMRF YMRF ZMRP	<b>±</b>	.0000 IN. XT .0000 IN. YT .0000 IN. ZT			\$		ELV-IB = RUDDER = GIMBAL =	.000 .000 1.000	ELV-CB = MACH =	.000 1.100
SECTION	( 1) VERTIC	AL .			DEPENDENT V	ARTABLE CF	<b>.</b>						
ALPHA ( 1	() = -8.106	BETA	(1) =	.000	2/BV X/CV	.1 58	.316	.609	.840	.925			
					.000	.7697	. 6710	6524	6799	-6548			
					.025	.2498	.0381		1568				
					.050	4250		0613					
					.150	29116	.0000	.1261	.1129				
					300	1578	-1145	.0996	.0525				
					.520	.0068		0213					
					.750	3103		6508					
					,900	10100		6402					
ALPHA ( 2	?) = -4.038	BETA	(1) =	•000	Z/BV X/CV	.1 58	.316	.600	.840	.925			
					.000	.7345	·6012	.5742	. 5968	.5776			
					.025	.1922		1485					
					.050	.3741		1086					
					1 5.7	2496	.0000	.0730	.0743				
					•300	.1157	.0665	.0530		0041			
					. 520			06327					
					.750			6733					
•					.900			- 6584					
ALPHA C.3	i) =363	BETA	( 1) '= -	-4-003	Z/BV X/CV	.158	.316	. 600	.840	•925 ·		-	
					.000	. 5978	. 5214	.4763	.4132	. 4951			
					.025	1409	3626	5608	7488	8885			
					.050	1737	3738	5560	7418	8487		•	
					-150	0333	.0000	5316	5740	7751			
					.300	0706	1952	4326	4491	4405			
					. 520			3295					
					. 750			- 7325					
					.900			7432					
ALPHA ( 3	) =363	BETA	(2) =	.012	Z/BV X/CV	-158	.316	•enn •	.840	.925			
					.000	.6979	.5591	.4994	. 51 58	. 5.726			
					.025	.1064	0382	1826		2553			
					.050			1524					
					-1 53	-2063	.0000	.0222		0101			
					.300	.0753	.01 61		0205				
					520			1025			•		
			•		. 750			6900					

- 3723 - 6739 - 6959 - 6681

FAGE 887

ARC11-014TA19 OTS

SRB-NOM MPS-OFF VERTICAL

(REUV44)

SECT	ION (	1)	VERTICA	ıĻ				DEPENDENT VAR	RIABLE C	•			
ALPHA	( 3)	=	393	BETA	( 3)	=	4.022	Z/BV X/CV	.1 58	.316	. 600	.840	.925
								.000	. 6044	. 4509	.3499	.3928	.3683
								-025	. 4971	.3669	.2538	.2631	-2639
								.050	4893	.3518	.2792	.2629	.220
								.150	.3494	.0000	.2280	.2193	.1496
								.300	2963	.1752	.1523	.1248	.0469
								520	.0417		0039	.0183	1316
								. 750	3508	5828	6288	6658	7123
								.900	-	3744	5856	-,6365	6820
ALPHA	( 4)	=	3.888	BETA	( 1)	Ξ	.000	<b>Z/</b> BV X/CV	-159	.316	. 600	.849	.925
								.000	6634	. 48 54	3895	.3951	.3917
								.025	·D694	1030	2366	2720	2916
								-050	2558	0853	2122	2012	2208
								.150	.1362	.0000	0624	0409	0783
								-300	0059	0619	0746	0867	1148
								. 520	1607	- 1596	1676	1445	2296
								. 750	3946	7010	7240	7388	7628
								.900		4197	7110	7279	7174
ALPHA	( 5)	=	7,977	BETA	(1)	=	.000	Z/BV X/CV	.158	.316	.eoo	.840	•925
								.000	. 6373	.4214	.2962	.2984	-3010
								.025	.0547	1451	2856	3210	3317
								.0 <i>5</i> 0	.2338	1294	2665	-,2576	2646
								·157	.0981	.0000	1299	1117	1346
								•300	0799	1347	1480	1456	1702
								• 52:0	2390	2201	2198	1954	2774
								. 750	4289	7172	7477	7607	7872
								.900		4511	7340	- 7477	- 7544

ORIGINAL FACTOR QUALITY

ARC11-014TA19 OTS

SRB-NOM MPS-OFF VERTICAL

(REUV45) ( 19 OCT 74 )

OF POOR QUALITY

### REFERENCE DATA

# PARAMETRIC DATA

SREF	=	2000.00000 SQ.FT.	XMRP	=	976.0000 IN. XT	£_V-18 =	.000	ELV-08 =	.000
LREF	=	1290.3000 IN.	YMRP	=	.0000 IN. YT	RUCCER =	.000	MACH =	1.250
BREF	Ē	1290.3000 IN.	ZMRP	=	400.0000 IN. ZT	GIMBAL =	1.000		
SCALE	=	.0200							

ALPHA (1) = -8.244 BETA (1) =009	SECTION ( 1) VERTI	CAL			DEPENDENT VARIABLE CP						
1,000	ALPHA ( 1) = -8.24	4 BETA	(1)	=009	Z/BV			. 600	.840	.925	
1.025   .2896   .1187  0189  0550  0894   .0901   .1281   .1281   .1284   .0000   .1276   .1281   .1281   .1284   .0000   .1276   .1281   .1281   .1284   .0000   .1276   .1281   .1281   .1284   .1281   .1281   .1284   .1281   .						.8402	. 7388	.6981	.7242	.7186	
1.050											
1.50											
300   3240   1791   1660   1446   1446   520   0.835   0.791   0.879   1.128   0.460   7591   -2532   -4.718   -4.627   -4.712   -4.748   -4.627   -4.712   -4.748   -4.627   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.713   -4.311   -4.628   -4.627   -4.713   -4.311   -4.628   -4.628   -4.713   -4.628   -4.628   -4.713   -4.628   -4.628   -4.713   -4.628   -4.628   -4.713   -4.628   -4.628   -4.713   -4.628											
1.520											
ALPHA (2) = -3.936 BETA (1) =009											
ALPHA (2) = -3.936 BETA (1) =009  Z/BV											
X/CV000						*********				4315	
.025 .2085 .0723058910521168 .050 .3678 .0996051205760578 .150 .3277 .0000 .1269 .1398 .1199 .300 .1916 .1233 .1036 .1078 .0855 .520 .0193 .0204 .0325 .06130022 .75026564974484249105059 .9002870477749164679  ***LPHA (3) =309 BETA (1) = -4.000	ALPHA ( 2) = -3.93	6 BETA	(1)	=009		1 58	.316	. භාග	.840	.925	
1.050	* *				רוכונו	. 78114	.6594	. 61 70	6310	6251	
1.50   .3277   .0000   .1269   .1398   .1109   .300   .1916   .1233   .1036   .1078   .0855   .520   .0193   .0204   .0325   .0613   .0025   .0513   .0026   .0777   .4916   .4679   .900   .2870   .4777   .4916   .4679   .4679   .2870   .4777   .4916   .4679   .4679   .2870   .4777   .4916   .4679					.025	-2085	.0723	0589	1052	1169	
300					.050	.3678	.0996	0512	0576	0578	
1.520					.157	.3277	.0000	.1269	.1398	.1109	
ALPHA (3) =309 BETA (1) = -4.000 Z/BV .158 .316 .600 .840 .925 .700 .025 .093 .1921 .4079 .6552 .6596 .6522 .0950 .157 .5572 .5568 .900 .7232 .6159 .5515 .5572 .5568 .050 .293 .0503 .0835 .0991 .0251 .0945 .0958 .0950 .1590 .025 .0993 .0503 .0835 .0991 .1515 .5572 .5568 .050 .090 .7232 .6159 .0515 .5572 .0568 .0750 .095					•300	.1916	.1233	.1036	.1078	.0855	
.9002870477749164679  ***LPHA (3) =309 BETA (1) = -4.000					• 529	.0193	JD2014	.0325	-0613	002	
ALPHA (3) =309 BETA (1) = -4.000  Z/BV .158 .316 .600 .840 .925  X/CV .000 .6595 .5918 .5515 .5002 .4989 .02509331921408264386522 .0901067 .0907366251445676 .300 .08330991267226604311 .52011731423214521571698 .75030495202536955145496 .9003337551853555329  ALPHA (3) =360 BETA (2) = .009  Z/BV X/CV .000 .7232 .6159 .5515 .5572 .5568 .025 .1299 .0277094413911515 .050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183					. 750	2656	4974	4842	4910	5.159	
X/CV .(00) .6595 .5918 .5515 .5002 .4989 .(02509331921408264386522 .(050)10661937407962556936 .1500471 .0000366251445677 .300 .08330991267226604311 .52011731423214521571698 .75030495202536955145496 .9003337551853555329  ALPHA (3) =360 BETA (2) = .009 Z/BV .158 .316 .600 .840 .925 X/CV .000 .7232 .6159 .5515 .5572 .5568 .025 .1299 .0277094413911515 .050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183					.900		2870	4777	-,4916	4679	
ALPHA (3) =360 BETA (2) = .009  ALPHA (3) =36	ALPHA (3) =309	9 BETA	(1)	= -4.000		1 58	.316	.600	.840	.925	
ALPHA (3) =360 BETA (2) = .009  ALPHA (3) = .0267  ALPHA (3) = .0267  ALPHA (3) = .0267  ALPHA (3) = .0267  ALPHA (3)						. 6595	. 5918	. 551.5	. 9712	.4989	
ALPHA (3) =360 BETA (2) = .009  ALPHA (3) = .0267  ALPHA											
ALPHA (3) =360 BETA (2) = .009  ALPHA (3) =30											
ALPHA (3) =360 BETA (2) = .009											
. 52011731423214521571698 .75030495202536955145496 .9003337551853555329 ALPHA (3) =360 BETA (2) = .009 Z/BV .158 .316 .600 .840 .925 X/CV .000 .7232 .6159 .5515 .5572 .5568 .025 .1299 .0277094413911515 .050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183											
ALPHA (3) =360 BETA (2) = .009  ALPHA (3) =360 BETA (2) = .009  Z/BV											
ALPHA (3) =360 BETA (2) = .009 Z/BV .158 .316 .600 .840 .925 X/CV .000 .7232 .6159 .5515 .5572 .5568 .025 .1299 .0277094413911515 .050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183											
X/CV .000 .7232 .6159 .5515 .5572 .5568 .025 .1299 .0277094413911515 .050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183											
.025 .1299 .0277094413911515 .050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183	ALPHA ( 3) =360	BETA	( 2)	= .009		-158	-316	• 600	.840	.925	
.025 .1299 .0277094413911515 .050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183					.000	7232	. 61 59	. 551 5	. 5572	. 5568	
.050 .2993 .0503083509180961 .150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183					.025						
.150 .2782 .0000 .0791 .0945 .0674 .300 .1537 .0808 .0582 .0658 .0470 .520018002510091 .02310348 .75027145117495649835183											
.300 .1537 .0808 .0582 .0658 .070 .52001800251091 .02310348 .75027145117495649835183											
.520018002510091 .02310348 .75027145117495649835183											
.75027145117495649835183											
					.900	*****					

SRB-NOM MPS-OFF VERTICAL

.0646 .0019 -.0259 -.0254 -.0446

a-.0944 -.0948 -.0911 -.0572 -.1244

-.3169 -.5590 -.5369 -.5425 -.5681

-.3439 -.5311 -.5343 -.5490

ARC11-0147A19 OTS

SECTION ( 1) VERTICAL DEPENDENT VARIABLE CP ALPHA (3) = -.405 BETA (3) = 4.025 Z/BV 1 58 .316 . 600 .849 .925 X/CV .100 .6498 . 5205 .4306 .4736 .025 . 48 59 .4928 .2685 .3296 .050 • 501901 .3907 .3172 .3124 .153 .3985 .0000 .2818 .2891 .2367 .300 .2692 .2172 .2189 . 520 .0932 ·0925 .1001 .1294 .0012 . 750 -.2709 -.4505 -.4519 -.4754 •900 -.2875 -.4257 ~.4621 -.5142 ALPHA ( 4) = 3.873 BETA ( 1) = .000 Z/BV -158 .316 . ദ്രാ X/CV .000 .7131 . 5471 .4597 .4607 .4643 .025 .0380 -.0157 -.1261 -.1626 -.1710 .050 .2810 -.0081 -.1117 -.1095 -.1047 .150 .2086 .0000 .0304 .0515 .0320 300 .0890 .0328 .0108 -0174 -- 0035 - 520 -.0690 -.0672 -.0566 -.0261 -.0832 . 750 -.2839 -.5343 -.5186 -.5234 -.5467 .900 -.3040 -.5135 -.5198 -.5234 ALPHA ( 5) = 7.989 BETA ( 1) = .000 Z/BV .158 .316 . 600 .840 .925 X/CV .000 .7021 .5148 .3911 .3767 .3794 .025 .0766 -.0165 -.1396 -.1816 -.1910 .050 .2936 -.0096 -.1278 -.1320 -.1314 .150 -2048 .0000 -.0069 .0062 -.0098

. ZN

- 520

.753

.9(1)

(REUV45)

.000

ARC11-D14TA19 OTS

SRB-NOM MPS-OFF VERTICAL

(REJV46) ( 19 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

= 976.0000 IN. XT ELV-IB = .000 ELV-CB =

 SREF = 2690.0000 S0.FT.
 XMRP = 976.0000 IN. XT
 ELV-IB = 1.000

 LREF = 1290.3000 IN.
 YMRP = .0000 IN. YT
 RUCCER = .000 MACH = 1.400

 BREF = 1290.3000 IN.
 ZMRP = 400.0000 IN. ZT
 GIMBAL = 1.000

SCALE = .0200

SECTION ( 1) VERTICAL

#### DEPENDENT VARIABLE CP

SECTION (	1) VERTICAL	Ling				DEPEN	DENT VAR	TABLE CP				
ALPHA ( 1)	= -8.175	BETA	(1)	=	.003		X/CV	.158	.316	.650	.840	.925
							.000	8519	.7846	.7403	.7569	.7546
							.025	.2874	.1752	.0382	0202	0362
							.050	.3865	.2926	.0489	.0318	.0158
							-150	.4396	.0000	.2409	.2377	.2181
							.300	.3012	.2368	.2072	.2143	.1963
							520	.1357	.1334	.1471	.1729	.1262
							. 750	2050	3483	3293	-,3286	3413
	*						.900		- 2538	3292	33€≥	3127
ALPHA ( 2)	= -4.002	BETA	((1)	=	003		Z/BV X/CV	1 58	.316	. 600	.840	.925
							.000	. 7804	.7193	.6 <del>C</del> (14	.6722	.6689
							.025	.2287	.1445	.0015		0642
							.050	.3!172	.1633	.0119	.0147	0117
							. 150	.3856	מממם.	.1895	.1959	.1678
							.300	.2518	.1870	.1634	.1686	.1533
							5217	.0851	.0837	.0994	.1293	.0837
							. 750	2122	3658	3445	3445	~.3625
							נינופ.		2554	3451	3483	3397
ALPHA ( 3)	=348	BETA	(1)	=	-4.000		Z/BV X/CV	.158	.316	. 600	.840	.925
							.000	. 6870	.6242	. 5949	.5487	.5489
							.025	1021	1231	3294	4785	4814
							.050	- 1140	1316	3201	4890	5135
							1 50	0595	.0000	2657	3927	4063
							.300	.1634	0635	1591	2602	3217
							520	0339	0645		1215	- 1117
							. 750	2518	4145	4103	÷.4242	4008
							.900		2753		4076	4010
ALPHA ( 3)	=369	BETA	( 2)	=	.016		Z/BV X/CV	.158	.316	. ഡാ	.849	.925
							.000	7059	6646	. 59116	. 59 70	. 5990
							.025	.1373	.0996	0211	0688	0777
							.050	.2195	.1084	0075	0222	0184
		• .					. 1 557	.3296	.0000	.1495	.1555	.1343
							-300	.2059	.1463	.1220	.1264	.1137
							. 529	.0506	.0462	.0605	.0913	.0480
							750	2233	3793	3594	3591	3790
							.900			3585	+.3600	3627



ORIGINAL PAGE IS OF POOR QUALITY ARC11-014TA19 OTS

SRB-NOM MPS-OFF VERTICAL

(REUV46)

SECTION ( 1) VERTICAL	DEFENDENT VARIABLE CF							
ALPHA (3) =360 BETA (3) = 4.028	Z/BV	1 58	.316	.600	.840	.925		
	XVCA							
	.000	. 6831	.5559	-4911	. 5279	. 5281		
	.025	.4935	.4541	.3217	.3782	.3844		
	-050	• 5250	.4349	.3666	.3678	.3691		
. · · · · · · · · · · · · · · · · · · ·	-150	.4293	.0000	.3229	.3433	-3133		
	•300	-3103	.2625	.2706	.2885	.2423		
	• 520	-1518	.1548	.1827	.2244	-1135		
.S.	. 753	2138	3294	3086	3199	3595		
المانية المانية المانية المانية	.900		2836	2949	3152	3619		
ALPHA ( 4) = 3.900 BETA ( 1) = .006	Z/BV	-158	-316	• 600	.840	-925		
	X/CV					,,,,		
	.000	. 6717	. 58 52	-5374	. 5032	- 50 66		
	.025	0176	.0345	0594	1026	1117		
	.050	.2132	.0313	0505	0545	0565		
	.150	.2231	.0000	.0919	-1043	.1064		
	-300	.1451	.0883	.0665	.0739	.0673		
	- 520	.0041	0019	.0092	.0453	.0022		
	. 75.1	2191	4090	- 3821	3778	3998		
	.900		2534	3828	3774	3920		
LPHA ( 5) = 7.653 BETA ( 1) = .006	Z/BV X/CV	-158	.316	.600	.840	.925		
	.000	. 6778	-5498	.4220	4208	-4205		
	.025	.0445	.0399	0728	1213	1272		
	.0 <i>5</i> 0	.2496	.0454	0571	0673	0684		
	· 1 50	2468	.0000	.0565	.0750	.0561		
	-300	.1156	-0539	.0255	.0336	.0218		
	- 520	0368	0385	0290	.0051	0355		
	- 750	2418	4229	3988	3992	4191		
	.900		5600	3952	3958	4146		

ONICINAL QUALITY

LITTE IN

ARC11-014TA19 OTS SRB-OFF MPS-OFF VERTICAL

(REUV47) ( 19 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

.000 ELV-IB = 8.000 ELV-CB = SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT RUDDER = .000 MACH = 1.400 LREF = 1290.3000 IN. YMRP = .0000 IN. YT GIMBAL = 1.000 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200

SECTION ( 1) VERTICAL	DEPENDENT VARIABLE CP						
ALPHA (1) = -4.050 BETA (1) =003	Z/BV X/CV	.158	,316	• 600	.840	.925	
	-000	. 78 57	. 71 60	.6608	.6735	6700	
	.025	.2229	.1444	.0161	0495	0573	
	.050	3099	.1623	.0186	.0072	.0039	
	.150	3851	.0000	.1922	.1975	.1668	
	.300	2516	.1899	.1626	.1684	.1537	
	. 520	.0882	.0825	.1021	.1272	.0854	
	.750	2992		3452	3434	3620	
	.900			3436			
ALPHA ( 2) =150 BETA ( 1) = -4.000	Z/BV X/CV	.158	.316	.600	.840	.925	
	.000	. 6842	.6182	.5925	.5582	.5496	
	.025	1053	1251	3210	4884	4810	
	.050		1329				
	-1 50	0597	.0000	2658	3954	4065	
	.300	.1630	0659	1608	2568	3201	
	. 529	0357	0663	1380	1189	1090	
	.750	3218	4167	4113	4259	4022	
	:9:1:1		3810	4183	4104	3998	
		-					
ALPHA (2) =129 BETA (2) = .009	Z/BV X/CV	.158	316	.600	.840	.925	
	.000	7084	. 6601	-5912	. 6007	. 5963	
	.025	-1264	.0949	0242	0761	0861	
	•0 <i>5</i> 0	2082	.1029	0107	0200	0298	
	. 1 50	.3296	.0000	.1474	. 1 500	.1328	
	.300	2021	.1449	.1207	.1256	.1149	
	. 520	.0917	.0466	.0575	.0912	.0485	
	. 753	3026	3810	3614	3570	3778	
	.900		3815	3675	3562	3635	
ALPHA (2) =234 BETA (3) = 4.028	Z/BV X/CV	1 58	.316	• 600	.840	.925	
	.000	.6777	- 5562	.4912	.5244	5240	
	.025	.4907	.4489	.3261	.3428	.3827	
	.050	.5212	.4310	.3676	.3669	.3669	
	.150	4263	.0000	.3298	.3420	.3053	
	.300	-3098	.2594	.2714	.2876	.2355	
	. 520	.1497	1 501	1795	.2195		
	750	3099			3227		
	.900			3008			



DATE DI MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 893

ARC11-014TA19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV47)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CF

ALPHA (3) = 3.867 BETA (1) = .009	Z/BV	.158	.316	.600	.840	.925
	X/CV					
	.000	. 671 5	. 5799	. 5761	• 50 50	- 50 63
	.025	0271	.0255	0728	1185	1267
	-050	.2007	.0230	0615	0697	0742
	-150	.2221	.0000	.0856	1004	.0967
	300	.1495	.0817	.0000	.0678	.0581
	- 520	0034	0094	.0032	.0403	0041
	. 750	-,3082	4144	3878	3817	4934
	.900		3820	3890	~.3823	3945

OKIGINAL PAGE IS
OF POOR QUALITY

ARC11-014TA19 OTS

SRB-NOM MPS-OFF VERTICAL

(REUV48) ( 19 OCT 74 )

#### REFERENCE DATA

# PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	ZMRP = 400.0000	IN. YT					ELV-IB = RUDDER = GIMBAL =	8.000 ELV-CB = .000 .000 MACH = 1.400 1.000
SECTION ( 1) VERTICAL		ENDENT VAR	RIABLE CP					
ALFHA ( 1) = -4.143 BETA	(1) =003	Z/BV X/CV	1 58	.316	.600	.840	.925	
and the same of th		,000	.7829	.7184	.6586	. 6732	.6995	
		.025	.2218	.1429		0501		<del></del> '
		.050	.3104	.1525	.0187	.0040	.0003	
		.150	.3865	.0000	.1925	.1944		
		.300	.2512	-1854	.1612	.1694		
		520	.0853	.0808	.1002	.1301	.0841	•
		.759	2290		3476			
		900	*2255	2838			3423	
ALPHA ( 2) =243 BETA	(1) = -4.003	Z/BV X/CV	-1 58	.316	.600	.840	.925	
		.000	. 68 53	. 6220	. 5948	.5602	.5508	00
		.025	1021	1249	3210	4992	4830	<b>19.50</b>
		.050			3216			# B H
		.150	0647		2666			夕 貫 質
		.300	.1635	0634	1585	2593	3216	0 K H
•		• 520	0361	0664	1337	1195	1152	
	1	. 750	2640	4166	4120	4277	4030	& <u>`</u> <u>A</u>
		.900			4188			V I
ALPHA ( 2) =324 BETA	(2) = .(2)	Z/BV X/CV	.1 58	.316	. 600	.840	.925	ORIGINAL PAGE IS ORIGINAL PAGELITY OF POOR QUA:
		.000	.7064	6584	59/14	. ക്കാദ	. 5964	13.7
		.025	-1338				0798	<b>≈</b> 56
		.050	-2094	.0976	0115	0215	0281	- <del>-</del> -
		1 50	.3289	.0000	.1445	. 1 510	.1282	
		.300	.1988	.1426	.1216	.1237		
		• 520	.0482	<b>₊</b> (1429	.0548	.0901	.0470	
		. 750	2413				3799	
		.900		2873	3623	80DE	3650	
ALPHA ( 2) =435 BETA	(3) = 4.025	Z/BV X/CV	1 58	.316	.600	.849	.925	
		.000	.6829	. 5612	.4918	5303	.5289	
		.025	.4942	.4536	.3295	.3472	.3888	•
		.050	. 5273	. 4353	.3701	.3703	.3720	
		1 50	. 4302	.0000	.3293	.3425	.3104	
		.300	.3131	.2623	.2751	.2895	-2391	
		. 529	.1536	.1556	.1834	.2238	.1128	
		. 750	2293	3284	3978	- 3195	3607	
		.900		2942	2944	31 59	3605	••••••••••••••••••••••••••••••••••••••



DATE DE HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 895

ARC11-014TA19 OTS SRB-NOM MPS-OFF VERTICAL

(REUV48)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

ALPHA ( 3) = 4.032	BETA	( 1)	=006	Z/BV X/CV	1 58	.316	.600	.849	.925
				.000	. 6693	.5793	. 5013	• 5004	-5046
				.025	0234	.0327	0668	-,1104	1224
				. 050	.2092	.0330	0537	0509	0568
				.150	.2224	.0000	.0896	.1068	.1024
				.300	-1491	.0833	.0623	.0721	.0609
				- 520	.0022	0070	.0068	.0445	0028
			•	. 750	2381	4126	3861	3798	4024
				.900		2783	3850	3789	3954

ARC11-014TA19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV49) ( 19 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

. 8.000 ELV-IB = SREF = 2600.0000 SQ.FT. XMRP = 976.0000 IN. XT םנים. MACH = .900 RUDDER = .0000 IN, YT LREF = 1290.3000 IN. YMRP = GIMBAL = 1.000 ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

.0200 SCALE =

ALPHA (1) = -4.041 BETA (1) = .000	SECTION ( 1) VERTICAL	DEPENDENT VAR	IABLE CP				
1.025	ALPHA (1) = -4.041 BETA (1) = .000		.158	.316	• 600	.840	.925
1.050		.000	. 51 64	3963	.4269	.4769	.4418
1.950   .1340  2122  3448  3553  4347     1.50  0286   .0000  1586  1597  1752     3.20  1591  1766  1850  2042  2355     5.20  2876  3124  3189  2854  3726     5.20  2876  3124  3189  2854  3726     5.20  2876  3124  3189  2854  3726     5.20  2876  3124  3189  2854  2373     5.20  2876  3124  3189  2854  2373     5.20  2876  3124  3189  2854  2373     5.20  2876  3168  2972  1607     6.20  2865  2876  2980  2865  2712  1607     7.20  2865  2980  2865  2980  2865     6.20  5187  7225  9140  9220  9572     6.20  5183  4002  8856  8849  8928     6.20  2867  4518  7485  7899  7211     6.20  2867  4518  7485  7899  7211     6.20  2867  4518  7485  7899  7211     6.20  2867  4518  7485  7899  7211     6.20  2867  4518  7485  7899  7211     6.20  2867  4518  7485  7899  7211     6.20  2867  4518  7485  7899  7211     6.20  2867  4518  7485  7899  7211     7.20  2868  3164  3138  2688     6.20  2867  2867  2867  2868     6.20  2867  2867  2867  2868     6.20  2867  2867  2867  2868     6.20  2867  2867  2867  2867     6.20  2867  2867  2867  2867     6.20  2867  2867  2867  2867     6.20  2867  2867  2867  2867     6.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867  2867     7.20  2867  2867  2867     7.20  2867  2867  2867     7.20  2867  28		.025	0641	2719	4139	4704	51 61
ALPHA (2) =162 BETA (1) =009 Z/BV .158 .316 .600 .840 .925 .7214 .2529 .7218 .920 .2874 .3284 .338 .3418 .3282 .3284 .3286 .3284 .3281 .3282 .3284 .3282 .3285 .3284 .3282 .3285 .3284 .3282 .3285 .3284 .3282 .3285 .3284 .3282 .3285 .3284 .3282 .3285 .3284 .3282 .3285 .3284 .3282 .3285 .3284 .3282 .32				2122	3448	3553	4347
3,20			0286	.0000	1586	1597	1752
1.520   -2.876   -3.124   -3.189   -2.854   -3.726     1.720   -2.942   -3.711   -4.636   -3.126     1.720   -2.633   -3.245   -2.712   -2.107     1.720   -2.633   -3.245   -2.712   -2.107     1.720   -2.633   -3.245   -2.712   -2.712     1.720   -2.633   -3.245   -2.712   -2.712     1.720   -3.816   -3.203   -3.169   -3.840   -9.25     1.720   -3.816   -3.203   -3.169   -3.840   -9.906     1.720   -3.957   -7.725   -9.9140   -9.920   -9.9572     1.720   -2.431   -0.000   -8.856   -8.849   -8.828     1.720   -3.756   -4.518   -7.4518   -7.865   -7.869   -7.711     1.720   -3.243   -0.000   -8.856   -8.849   -8.828     1.720   -3.756   -4.518   -7.865   -7.899   -7.711     1.720   -3.243   -3.042   -3.313   -3.641   -3.138   -2.888     1.720   -3.243   -3.343   -3.641   -3.138   -2.888     1.720   -3.243   -3.343   -3.641   -3.138   -2.888     1.720   -3.243   -3.343   -3.641   -3.138   -2.888     1.720   -3.243   -3.343   -3.441   -3.168   -3.169     1.720   -3.243   -3.343   -3.441   -3.466   -9.906     1.720   -3.243   -3.343   -3.441   -3.466   -9.906     1.720   -3.243   -3.343   -3.441   -3.466   -9.906     1.720   -3.243   -3.343   -3.441   -3.466   -9.906     1.720   -3.245   -3.245   -3.333   -3.413   -3.441     1.720   -3.245   -3.245   -3.333   -3.431   -3.441   -3.466   -9.906     1.720   -3.245   -3.245   -3.333   -3.431   -3.441   -3.466   -9.906     1.720   -3.245   -3.245   -3.245   -3.333   -3.431   -3.441   -3.466     1.720   -3.245   -3.245   -3.245   -3.343   -3.441   -3.466   -3.906     1.720   -3.245   -3.245   -3.343   -3.441   -3.466   -3.906     1.720   -3.245   -3.245   -3.343   -3.441   -3.466   -3.906     1.720   -3.245   -3.245   -3.343   -3.441   -3.466   -3.906     1.720   -3.245   -3.245   -3.343   -3.441   -3.466   -3.906     1.720   -3.245   -3.245   -3.343   -3.441   -3.466   -3.906     1.720   -3.245   -3.245   -3.343   -3.441   -3.466   -3.906     1.720   -3.245   -3.245   -3.245   -3.245   -3.245     1.720   -3.245   -3.245   -3.245   -3.245   -3.245     1.720   -3.245   -				1766	1850	2042	2355
ALPHA (2) =198 BETA (1) = -4.003				3124	3189	2854	3726
ALPHA (2) =198 BETA (1) = -4.003  Z/BV				3701	4636	31€8	2373
X/CV  .000				2633	3245	2712	1607
1.025	ALPHA (2) =198 BETA (1) = -4.003		.158	.316	.00	.840	.925
1.093		.000	3816	.3293	.3169	.2864	.2302
ALPMA (2) =285 BETA (3) = 4.022    0.951		.025	4596	7186	9060	9524	9516
300			5357	7225	9040	9620	9572
ALPHA (2) =285 BETA (3) = 4.022		.150	2431	.0000	8856	8849	8928
ALPHA (2) =162 BETA (2) = .009  Z/BV		תוכנב.	3761	4518	7485	7899	7211
ALPHA (2) =162 BETA (2) = .009  Z/BV		• 520	5133	4002	5599	6302	5119
ALPHA (2) =162 BETA (2) = .009  Z/BV		.751	2948	3943	3641	3138	2688
X/CV  .LXXI		.900		2780	2947	2529	1891
ALPHA (2) =285 BETA (3) = 4.022	ALPHA (2) =162 BETA (2) = .009		.158	.316	. 600	.840	.925
ALPHA (2) =285 BETA (3) = 4.022 Z/BV .158 .316 .600 .849 .925 X/CV .090 .3771 .2237 .1313 .1944 .1591 .025 .2676 .1632 .0978 .1317 .1225 .090 .2624 .1468 .1163 .1133 .0564 .190 .190 .000 .000 .000 .000 .000 .000			40.05	7044	2270	4177	3050
ALPHA (2) =285 BETA (3) = 4.022 Z/BV .158 .316 .600 .840 .925 X/CV .000 .3771 .2237 .1313 .1944 .1591 .025 .2676 .1632 .0978 .1317 .1225 .090 .2624 .1468 .1163 .1133 .0564 .190 .1131 .0000 .0573 .04640354 .30001100232033707601601 .52016602139286521333825 .75028053495266759885922							
ALPHA (2) =285 BETA (3) = 4.022 Z/BV .158 .316 .600 .840 .925 X/CV .000 .3771 .2237 .1313 .1944 .1591 .025 .2676 .1632 .0978 .1317 .1225 .050 .2624 .1468 .1163 .1133 .0564 .150 .1131 .0000 .0573 .04640354 .30001100232033707601601 .52016602139286521333825 .75028053495266521333825 .75028053495467559885922							
ALPHA (2) =285 BETA (3) = 4.022 Z/BV .158 .316 .600 .840 .925 X/CV .000 .3771 .2237 .1313 .1944 .1591 .025 .2676 .1632 .0978 .1317 .1225 .050 .2624 .1468 .1163 .1133 .0564 .150 .150 .1131 .0000 .0573 .04640354 .30001100232033707501601 .5201600 .213928055922							
.52031563164316629073936 .79025933430434933602240 .9002693261929851394 ALPHA (2) =285 BETA (3) = 4.022 Z/BV .158 .316 .600 .840 .925 X/CV .000 .3771 .2237 .1313 .1944 .1591 .025 .2676 .1632 .0978 .1317 .1225 .090 .2624 .1468 .1163 .1133 .0564 .190 .1131 .0000 .0573 .04640354 .30001100232033707501601 .52016602139236621333825 .75026053495467559885922							
ALPHA (2) =285 BETA (3) = 4.022 Z/BV .158 .316 .600 .840 .925 X/CV .000 .3771 .2237 .1313 .1944 .1591 .025 .2676 .1632 .0978 .1317 .1225 .090 .2624 .1468 .1163 .1133 .0564 .150 .1131 .0000 .0573 .04640354 .30001100232033707501601 .5201660 .21392366 .21333825 .75026053495467559885922							
ALPHA (2) =285 BETA (3) = 4.022 Z/BV .158 .316 .600 .840 .925 X/CV .000 .3771 .2237 .1313 .1944 .1591 .025 .2676 .1632 .0978 .1317 .1225 .090 .2624 .1468 .1163 .1133 .0564 .150 .1130 .1131 .0000 .0573 .04640354 .30001100232033707501601 .5201600 .21392366 .21333825 .75026053495467559885922							
X/CV  .000 .3771 .2237 .1313 .1944 .1591  .025 .2676 .1632 .0978 .1317 .1225  .050 .2624 .1468 .1163 .1133 .0564  .150 .1131 .0000 .0573 .04640354  .30001100232033707501601  .52016602139236621333825  .75026053495467559885922			-,2353				
.025 .2676 .1632 .0978 .1317 .1225 .090 .2624 .1468 .1163 .1133 .0564 .190 .1131 .0000 .0573 .04640354 .30001100232033707601601 .52016602139236621333825 .75026053495467559885922	ALPHA (2) =285 BETA (3) = 4.022		.1 58	.316	. 600	.849	.925
.050 .2624 .1468 .1163 .1133 .0564 .150 .1131 .0000 .0573 .04640354 .30001100232033707501601 .52016602139236621333825 .75026053495467559885922		.000	.3771	.2237	.1313	.1944	.1591
.150 .1131 .0000 .0573 .04640354 .30001100232033707501601 .52016002139236621333825 .75026053495467559885922		.025	.2676	.1632	.0978	.1317	.1225
.30001100232033707501601 .52016002139236621333825 .75026053495467559885922		-050	.2624	.1468	.1163	.1133	.0564
.52016602139236621333825 .75026053495467559885922		.150	.1131	.0000	.0573	.0464	0354
.75026053495467559885922		.300	0110	0232	0337	0750	1601
.75026053495467559885922		- 520	1660	2139	2366	2133	3825
			÷.2605	3495	4675	5988	5922
				2127	2282	4493	2451

OF POOR QUALITY



DATE DI HAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 897

ARC11-014TA19 OTS

SRB-OFF MES-OFF VERTICAL

(REUV49)

SECTION ( 1) VERTICAL

# DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.828	BETA	(1) =	003	Z/BV X/CV	. 1 58	.316	.600	.840	925
					.000	.3423	.2844	.2967	.3657	.3226
					.025	1506	3719	4280	4310	
					.050	0227	2184	3599	2839	3768
					.1 50	1134			1611	
					.300				2229	
					. 520				3/123	
					.750	2550	2697	4672	3322	2252
					.900		2340	2352	3041	1498

. 520

.750

.900

Z/BV

X/CV .000

.025

.158

.70144

.1139

ARC11-014TA19 OTS

SRB-CFF MPS-OFF VERTICAL

(REUV50) ( 19 OCT 74 )

OF POOR QUALITY

PARAMETRIC DATA

REFERENCE DA	TA
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4.000 ELV-CB = 0.000 ELV-18 = SREF = 2690,0000 SQ.FT. XMRP = 976,0000 TN. XT 1.100 MACH = RUDDER = .000 .0000 IN. YT YMRF = LREF = 1290.3000 IN. 1.000 GIMBAL = ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. SCALE = .0200 DEPENDENT VARIABLE CP SECTION ( 1) VERTICAL .925 .600 .840 Z/BV .158 .316 ALPHA (1) = -4.017 BETA (1) = -0.003X/CV .5711 . 5942 .7291 . 5980 .5658 .000 -.1476 -.18937 -.2426 .0076 .025 .1851 -.1076 -.1272 -.1717 .0468 .050 .3641 .0698 .0334 .0673 .150 .2449 .0000 -.0121 .0439 .0130.0540 .1150 נונוצ. -.0685 -.0469 -.1305

-.0505 -.0557 -.3735 -.6723

-.3958

ALPHA ( 2) = -.102 BETA ( 1) = -4.000

euio. .840 Z/BV .153 .316 X/CV .4770 . 4534 .4091 CXX R019 . 5245 -,1465 -.3583 -.5539 -.7334 -.8820 .025 -,1754 -.3727 -.5537 -.7222 -.8439 .050 .0000 -.5300 -.5733 -.7406 -.0263 150 -,0639 -.1904 -.4264 -.4609 -.4377 .3(1)(1 -.2458 -.2506 -.3245 -.4244 -.3503 . 529 -.4324 -.6672 -.7297 -.7349 -.7692 . 753 -.4656 -.7407 -.7197 -.7070 .900

.316

.5684

-.0255

.000

5353

-.1693

-.6797 -.6982

-.6675 -.6892 -.6455

.841)

-.1977 -.2404

.925

-.1703

ALPHA ( 2) # -.141 BETA ( 2) # .012

.0045 -.1365 -.1263 .050 .3253 .0324 .0466 .0031 -0.000.2177 153 .0147 -.0080 -.0353 .300 .0905 .0249 -.0908 -.0703 -.1521 .520 -.0703 -.0821 -.3705 -.6691 - 終35 - 7087 . 750 -.6758 -.6636 -.6845 -.6566 -.3951 .900 .925 . 600 Z/BV .158 .316 X/CV .3401 .3801 .3591 .4426 .000 . 5960 .2551 .2608 . 48 53 .3636 .2429 .025 .2517 .2105 .3485 .2700 .4839 .050 .2086 -1496 .3447 .0000 .2190 .150 .1151 .0382 .1666 .1424 .2033 .300 .0055 -.1422 .0039 -.0139 . 520 .0357 -.3866 -.5988 -.6393 -.6794 -.7264 , 753 -.4085 -.5947 -.6527 -.7086 .900

ALPHA ( 2) = -.234 BETA ( 3) = 4.025

FAGE 899

ARC11-014TA19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV50)

SECTION ( 1) VERTICAL

DATE OI MAY 75

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.879 BETA ( 1) =	.000	Z/BV X/CV	.158	.316	. 600	.840	.925
		.000	6754	.4927	.4081	.4226	40 59
		.025	.0714	0843	2201	2530	- 2684
		.050	2583	0738	1894	1766	1978
		.150	.1482	.0000	0469	0219	0616
		3/,10	.0109	0491	0607	0661	1000
		- 520	- 1432	1505	1501	1267	2106
		.750	4083	7062	7057	7209	7444
		900		4369	6917	7109	6993

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2.4

ARC11-014TA19 OTS SRB-OFF MPS-OFF VERTICAL

(REUV51) ( 19 CCT 74 )

# REFERENCE DATA

# PARAMETRIC DATA

SREF = 2600.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRP = 976.0000 IN. XT YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT		ELV-IB = RUDDER = GIMBAL =	8.000 ELV-C8 = 4.000 .000 MACH = 1.250 1.000
SECTION ( 1) VERTICAL	DEPENDENT VAR	TABLE CP		
ALPHA ( 1) = -4.008 BETA	(1) = .000 Z/BV X/CV	.158 .316 .800	.840 .925	
	.000	.7880 .6702 .6231	.6449 .6334	
	.025	.2185 .08400550	09381086	
	.050		03840557	
	.150	.3378 .0000 .1308	.1502 .1214	
	300	.2045 .1265 .1122	.1141 .0942	
	.520	.0313 .0259 .0408	.0686 .0043	
	.750	314649404794	48484999	
	CH.G.	34454731	48444624	
ALPHA ( 2) =138 BETA	(1) = -4.003 Z/BV X/CV	.158 .316 .600	.840 .925	
	.000	.6533 .5889 .5464	.5304 .4972	
	.025	116022644123	65296562	
	.053	125223444113		
	.150		51795724	
	.300	.072209062721	27324339	
	.520	121914552135	22611782	
	.750	355655925364		
	.900	38415498	54085402	
ALPHA ( 2) =225 BETA	VB/X (2) = (2)	.158 .316 .600	.840 .925	
	.000	.7160 .6085 .5456	.5596 .5534	
	.025	.1233 .02890941	13591502	
	.050	.2988 .05240803	08200933	
	.150	.2750 .0000 .079i	.0932 .0669	
	.300	.1522 .0800 .0559	.0640 .0447	
	• 520	014902100100	.02270363	
	. 750	330751204952	49675178	
	.900	36614901	49824891	
ALPHA ( 2) =252 BETA	(3) = 4.022 Z/BV X/CV	.158 .316 .600	.840 .925	
	.000	.6518 .5206 .4327	.4713 .4621	
	.925	.4867 .4015 .2750	3069 3361	
	.0.50	.5126 .3922 .3229	.3184 .3006	
	.150	.4012 .0000 .2837	.2876 .2399	
	• <b>3</b> 00	.2733 .2174 .2291	.2219 .1561	
	. 520	.0959 .0952 .1048	.1324 .0043	
	.750	321145054452	47105140	
	.900	34324208	46215394	



DATE OF MAY 75

## TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

PAGE 901

ARC11-0141A19 OTS SRB-OFF MFS-OFF VERTICAL

(REUV51)

SECTION ( 1) VERTICAL

LPHA	( 3) =	3.864	BETA	(1)	= .000	Z/BV	.158	.316	. 600	.840	.925
						X/CV					
						.000	.7078	. 5454	.4560	.4632	.4610
						.025	.0400	0143	1259	1685	1711
						.050	.2733	0097	1124	1966	1115
						-150	.2045	.0000	.0269	.0507	•0308
						.300	.0993	.0292	.0120	.0127	0067
						• 520	0634	0681	0583	0262	0862
						.750	3524	5496	5202	5256	5489
						.900		3843	5144	5227	5256

SCALE =

ARC11-014TA19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV52) ( 19 OCT 74 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT TY, NI CCCO. LREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. .0200

4.000 8.000 ELV-CB = ELV-18 = MACH = 1.400 RUDDER = .000 GTMBAL = 1.000

PARAMETRIC DATA

SECTION ( 1) VERTICAL	DEPENDENT VAR	TABLE CP				
ALPHA ( 1) = -3.990 BETA ( 1) = .000	Z/BV	1.58	.316	. 600	.840	.925
ALTHA ( I) 4 SISSE DEM	X/CV					
	.000	.7774	.7226	.6637	.6769	.6759
	.025	.2191	.1445	.0098	0447	0553
	•0 <i>5</i> 3	.3004	.1642	.0217	.0000	.0937
	.150	.3852	.0000	.1936	.1945	.1664
	.300	.2577	.1919	.1629	.1705	.1558
	. 529	.0906	.0852	.1013	1318	.0852
	.750	2909	3662	3435	3480	3662
	.900		3575	3429	3528	3451
ALPHA ( 2) =195 BETA ( 1) = -4.003	Z/BV X/CV	.158	.316	. 600	.840	.925
	.000	. 6783	.6185	. 5908	.5784	.5457
	.025	- 1349	1374	3285	4959	4888
	.050	1388	1444		4817	- 5226
	.150	0491	מסטמ	2709	4018	4149
	.300	.1484	0610	1670	2567	- 3253
	.520	0390	0652	1416	1302	1204
	. 750	3222	4244	4167	4310	4084
	.900	.0223		4219	4162	4082
	• 3-121					
AI PHA (2) =198 BETA (2) = .009	Z/BV	.158	316	. 600	.840	.925
ALPHA (2) =198 BETA (2) = .009	X/CV					
	.000	.7028	.6557	.5893	. <del>(</del> (14!)	5952
	,025	.1177	.0905	0239	0778	0842
	.050	.1996	.0982	0115	0223	0302
	.150	.3236	.0000	.1453	.1536	.1294
	300	2021	1 450	.1209	.1254	.1112
	. 520	.0481	.0461	.0550	.0908	.5449
	.750	3034	3832	3630	3631	3839
	. 100	- 1 3:13 4	3804	3618	3646	3700
	• 900		- 100514	.0020	10040	
	Z/BV	.1 58	.316	. ഡ	.840	.925
ALPHA ( 2) =186 BETA ( 3) = 4.022	X/CV	11 50	1310	, ,		
		6754	5538	.4904	.5199	.5229
	.000	,6754		.3273	.3411	.3882
	.025	.4828	.4499		.3668	.3661
	.050	51 61	. 4359	.3796		.3068
	-1 53	. 42:59	.0000	-3250	.3407	
	.300	•3098	.2600	.2703	.2868	.2362
	. 520	.1513	.1 52 5	.1791	.2211	.1079
	. 750	3200	3311	3128	3258	3654
	.900		3254	-,2992	3221	3678

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TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 903

ARC11-014TA19 OTS

SRB-OFF MPS-OFF VERTICAL

(REUV52) -

SECTION ( 1) VERTICAL

ALPHA ( 3) =	3.960	BETA	(1) =	.000	<b>Z</b> /BV X/CV	1 58	-316	.600	.849	،925
					.000	.6669	.5818	. 5029	.5078	, 508 5
		•			.025	0158	.0344	0644	1124	1141
					.050	.2176	.0339	0508	0515	0591
					· 1 50	.2226	.0000	.0886	.1102	.0989
					.300	.1418	.0855	.0663	.0732	.0628
					- 520	.0018	0038	.0086	.0435	0035
					.7 <i>5</i> 0	2992	4123	3860	-,3839	41761
					.900		3681	3858	3838	3952



ARC11-014TA19 OTS

SRB-NOM MES-OFF VERTICAL

(REUV53) ( 19 OCT 74 )

#### REFERENCE DATA

PARAMETRIC DATA

4,000 ELV-18 = 8.000 SREF = 2690.0000 50.FT. XMRP = 976.0000 IN. XT RUCDER = .000 MACH = .900 .DOOD IN. YT LREF = 1290.3000 IN. GIMBAL = 1.000 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT

SCALE = 10200

SECTION ( A) VERTICAL

#### DEPENDENT VARIABLE CP

SECTION ( 1	I) VERTICAL		DEPENDENT VAL	RIABLE CF	•			
ALPHA (1)	-4.179 BETA	(1) =803	Z/BV X/CV	. 1 58	.316	• 600	.840	.925
			.000	- 51 53	.3875	.4262	.4670	.4273
			.025	0746	2805	4216	4921	5499
			.0 <i>5</i> 0	1211	2262	3532	3892	4522
			.150	0386	.0000	1653	1793	1907
			.300	1712	1731	1914	2261	2534
			. 520	3056	3170	3495	3028	3969
			.750	3112	3752	4870	3421	2581
			.900		5660	3645	3080	1855
ALPHA ( 2)	BETA	(1) = -3.997	<b>Z</b> /BV X/CV	.158	.316	.600	.840	.925
			.000	.3783	.3172	-3153	.2831	.2312
			.025	4651	7169	9132	9742	9821
			.050	5052	7265	9079	9836	9738
			.150	2490	.0000	8848	8981	9360
			.300	3777	- 4541	7629	8090	7347
		•	.520	5197	4095	5603	6397	5247
			.750	3092	3097	3849	3251	2713
			.900		2919	2267	- 2596	2023
ALPHA (2)	360 BETA	(2) = .012	Z/BV X/CV	.158	.316	. සාග	.840	925
			.000	.4849	.3124	.3445	.4208	.3901
			.025		3152	4346	4668	5011
			-050	.0761	2721	3995	3410	4100
			.150	0793	.0000	1926	1629	- 1843
			.300	2226		2024	2168	2403
			.520	3221	3242	3176	2898	3938
			. 750		3557	4532	3190	2297
			.900			2610	2767	1507
ALPHA ( 2)	411 BETA	(3) = 4.022	Z/BV X/CV	1 58	.316	.600	.840	.925
			.000	.3764	.2268	.1332	.1982	1 602
			.025	.2664	.1 561	.0943	.1252	.1172
			.050	.2622	.1422	.1144	.1045	.0425
			. 1 50	.1059	.0000	.0480	.0376	0418
			.300	0207	0255	0435	<b>∞.</b> 0747	1625
			. 520	1792	2192	2385	2166	3994
			750	2701	3739	4900	- 6081	8199
			.900		2234	2443	4432	2800

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FAGE 905

ARC11-014TA19 OTS SRB-NOH MPS-OFF VERTICAL

(REUV53)

SECTION ( 1) VERTICAL

QCD. 3.158 .3.16 .000. = - (1) ATAM 3.16 .600. X/CV	.840	.925
.000 .3587 .2897 .2591	.3674	.3280
.025155237863984	4355	4726
.050027121253378	3007	3775
.1501122 .00001731	1607	1945
300233832071811	2249	2588
.529311928363244	- 3031	4193
.750252728124751	3235	- 2138
930 - 2542 - 2281	2775	1227

ARC11-014TA19 OTS SRB-NOM MPS-OFF VERTICAL

(REUV54) ( 19 OCT 74 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT .0000 IN. YT YMRP = LREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT BREF = 1290.3000 IN. SCALE = .0200

4.000 8.000 ELV-CB = ELV-IB = 1,100 .000 MACH = RUCDER = 1.000 GIMBAL =

PARAMETRIC DATA

SECTION ( SAVERTYCAL)

SECTION ( i) VERTICAL	DEPENDENT VAR	HABLE CP				
ALFHA (1) = -4.149 BETA (1) = .000	Z/BV X/CV	.158	-316	. 600	.840	.925
	.000	.7245	. 5947	. 5608	. 5908	.5684
	.025	.1793	.0040	1559	1985	2514
	.050	.3630	.0398	-,1399	1312	1813
	.150	.2396	.0000	.0620	.0637	.0262
	.300	.1085	.0451	.0412	.0052	0170
	. 520	0536	0636	0746	0511	1365
	.753	3518	6700	6865	7050	7144
	.900		3796	6733	6963	6522
ALPHA (2) =315 BETA (1) = -4.003	Z/BV X/CV	.158	.316	. 600	.840	.925
	.000	.6026	.5279	.4898	.4559	.4134
	.025	1401	3547	5513	7338	8800
	.050	1728	3654	5461	7270	8420
	•150	0183	.0000	5217	5692	7446
	•300	0628	1803	4225	4515	4373
	. 525	2423	2448	3202	4092	3426
	. 750	4050	5870	7255	7300	7669
	.900		4425	7352	7183	7066
ALPHA (2) =327 BETA (2) = .006	Z/BV X/CV	-1 58	.316	.600	.840	.925
	.000	.7029	. 5649	. 5020	.5242	. 5.193
	.025	.1100	0290	1703	2056	2515
	.053	.3211	.0008	1440	1389	1767
	.150	.2135	.0000	.0283	.0419	0032
	.300	.0848	.0247	.17097	0118	0393
	. 520	0741	0858	[]947	0758	1 580
	.750	3530	6555	6807	7007	7155
	.900		3709	6643	6914	6611
ALPHA (2) =288 BETA (3) = 4.016	<b>Z/B</b> V <b>X/</b> CV	-1 58	.316	. භාග	.840	.925
•	.000	. 6013	.4462	.3455	.3838	.3655
	.025	. 49!13	.3651	.2457	.2529	.2599
	.050	.4835	.3495	.2726	.2548	.2125
	-150	.3465	.0000	.2232	.2149	.1447
	.300	.2044	.1696	.1469	.1178	.0417
	. 529	.0388	.0076	0086	.0098	1388
	.750	3573	5875	6330	6731	7216
	.900	· · · · ·	3822	- 5885	-,6466	7020



DATE DI MAY 75

## TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

FAGE 907

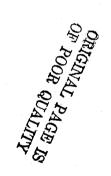
ARC11-014TA19 OTS

SRB-NOM MPS-OFF VERTICAL

(REUV54)

SECTION ( 1) VERTICAL

ALFHA ( 3) = 3.915 BETA ( 1) =003	X/CV	.1 58	.316	.600	.840	.925
	.000	. 6759	.4967	40 68	.4243	.4075
	.025	.0745	0780	2180	2446	2657
	.050	.2623	0706	1937	1773	1975
	•150	.1579	.0000	0423	0203	0556
	.300	.0147	0472	0554	0615	0950
	- 520	1410	1477	1480	1236	- 2082
	.751	3823	6799	7008	7171	7402
	onn		- 4102	- 68 53	- 7175	- 6970



ARC11-0141A19 OTS SRB-NOM MPS-CFF VERTICAL

(REUV55) ( 19 CCT 74 )

## REFERENCE DATA

PARAMETRIC DATA

50FF - 6000 0000 F0 F7 Vich - 270 0000						nv.to -	o nna	ELV-CB =	4.000
SREF = 2690.0000 50.FT. XMRP = 976.0000						ELV-IB =	8.000	MACH =	1.250
	IN. YT					RUDDER =	,000 	MACH =	1.233
BREF = 1290.3000 IN. ZMRF = 400.0000	) IN. ZI					GINBAL =	1.000		
SCALE = .0200									
SECTION ( 1) VERTICAL DEF	ENDENT VA	RIABLE CP	•						
ALFHA ( 1) = -3.981 BETA ( 1) = .000	Z/BV X/CV	.158	.316	.600	.840	.925			
	2000	.7763	.6584	. 61 64	.6365	.6263			
	.025	.2042		0630		1197			
	.050	.3618	.0992			0579			
	1 50	.3293	.0000	.1241	.1435				
	.300	.1954	.1262	.1037	1966				
	. 529	.0227	.0228	.0319		0049			
	750	2764		4859		- 5386			
	.900	12.04		4792					•
ALPHA ( 2) =369 BETA ( 1) = -4.000	Z/BV	.158	.316	. 600	.840	.925			
	X/CV								
	.000	6559	. 5899	.5512	. 5321	.4975			
	.025	1116	2288	4127	6573	6581			
	.050			4110					
	•150	0349		<b></b> 3682					
	.300			2741					
	• 520			2132					
	.753	3062		- 5386					
	.900		3404	5543	5425	54U/			
ALFHA (2) =309 BETA (2) = .012	Z/BV	.158	.316	. භාග	.840	.925			
	X/C/								
	.000	. 71 75	€074	-5485	.5612	.5542			
	.025	.1277	.0261	0998	1421	1536			
•	.050	·295 <b>7</b>	.0473	0878	0878	0982			
	1 50	.2732	.0000	.0771	.13954	.0662			
	.300	.1487	.0792	.0545	.0612	.0415			
	. 520	0202		0124		01406			
	. 7 <i>5</i> .)	2873		4990					
	.900		3152	4930	5.727	4947			
ALPHA ( 2) =3(H) BETA ( 3) = 4.022	Z/BV	.158	.316	• 600	.840	.925			
	X/CV								
	000	. 6445	. 5121	. 4273	.4631	.4578			
	.025	.4790	.3934	.2753	3043	.3247			
	.0.50	- 5028	.3864	.3187	.3115	.2933			
	+150	. 391 5	.0000	.2777	.2882	.23:19			
	• 300	.5656	.2184	.2177	-21 52	.1471			
	. 520	*0905	.0897	.0988		0057			
	. 750	2863		4564	4822	5267			
	01313		- 0077	1000	4 700 4	5000			

-.2977 -.4290 -.4721 -.5229



(3)

DATE OI MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 909

ARC	1-01	41A19	OTS

SRB-NOM MPS-OFF VERTICAL

-.3339 -.5212 -.5286 -.5301

(REUV55)

SECTION ( 1) VERTICAL	DEPENDENT VARIABLE CO	•	
ALPHA ( 3) = 3.966 BETA ( 1) =	ເກດ3 Z/BV .158 ×/c∨	.316 .600 .8	40 .925
	.000 .7054	.5406 .4555 .4	591 .4554
	.025 .0382	018113141	6831773
	.050 .2738	009911811	1391092
	.150 .2059	.0000 .0234 .0	442 .0255
	.300 .0882	.0261 .0073 .0	0970115
	.5200686	072706210	3290907
	.7503059		

900

ARC11-014TA19 OTS

SRB-NON: MPS-OFF VERTICAL

(REUV56) ( 19 CCT 74 )

REFERENCE D	ATA						PARAMETRIC	DATA	
SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRP = 976.0000 IN. XT YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT					ELV-IB = RUDDER = GIMBAL =	8.000 .000 1.000	ELV-CB = MACH =	4.000 1.400
SECTION ( 1) VERTICAL	DEPENDENT VA	RIABLE CP							
ALPHA ( 1) = -4.071 BETA	(1) = .000 Z/8V X/CV	-158	.316	. 200	.840	-925			
	.000	.7774	.7211	6633	.6777	.6721			
	.025	-2187	-1415	-0114	0428	0539			
	.050	.2883	-1585	-0314	-0115	0088			
	.150	.3833	.0000	-1938	.1993	.1612			
	.300	.2524	.1908	.1626	.1756	-1 530			
	. 529	.0873	.0840	.0983	.1299	.0843			
	. 750	2278	3683	3455	3470	3661			
	.900		2763	3462	3520	3449			
ALPHA ( 2) =294 BETA	(1) = -4.800 Z/BV X/CV	-158	.316	.600	.849	.925		ORIGINAL OF POOR	
	.000	. 6807	. 6238	. 59 54	. 5831	.5521		- 12 E	
	.025	1304	1345	3246	4900	4821		\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\}\\ \text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\ti}\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\	
•	•ពនា	1491	- 1393	3235	4790	51 78		$\mathbf{S}\mathbf{z}$	
	.150	0522	.0000	- 2693	3987	4976		∌ ₽.	
	•300	.1513	0629	1611	2562	3293			
	• 520	0356	0623	1337	1276	1200		م ہے	
	.750	2583	4200	4121	4276	4936		J <sub>A</sub> A	
	.900		2866	4183	4102	4031		E G E	
ALPHA ( 2) =375 BETA	VBV X/CV	-158	.316	. 600	.840	.925		IGINAL PAGE IS POOR QUALITY	
	.000	7018	. દલસા	-5865	• 5991	-5962			
	.025	.1181	.0932	0252	0771	0835			
	.050	.2072	.0926	0107	0171	0338			
	•150	.3238	.0000	.1436	1550	.1265			
	7177								

.300

.520

. 750

.2000

.0481

ALPHA ( 2) = -.423 BETA ( 3) = 4.028

.900 -.2882 -.3668 -.3662 -.3703 Z/BV .158 .316 . 600 .840 .925 X/CV .000 .6772 . 5551 . 4909 .5182 . 5249 .025 .4857 4500 .3308 .3492 3865 .050 . 51 58 .4319 .3698 .3651 .3687 .157 .4238 .0000 .3283 .3422 .3957 •300 .3091 .2606 .2718 .2879 .2362 . 521) .1501 .1546 .1791 .2189 .1075 -.2319 -.3303 -.3127 -.3235 -.3663 . 750 .900 -.2995 -.2995 -.3213 -.3663

.1444

.0444

-1170

.0529

-.2439 -.3853 -.3666 -.3628 -.3853

1206

.0895

.1082

.0438

DATE OI MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 911

ARC11-014TA19 OTS

SRB-NOM MES-OFF VERTICAL

(REUV56)

SECTION ( 1) VERTICAL

I PHÀ	(3) z	3.834	BETA	(1) =	003	Z/BV	.158	.316	. 600	.840	.925	
						X/CV	•					
						.000	. 6660	. 5788	.4991	.5027	.5013	
						.025	0181	.0324	0663	1105	1196	
						.050	.2097	.0294	0532	0613	0617	
						.150	.2211	.0000	.0878	.1039	.0988	
						300	.1409	.0838	.0614	.0682	∙0583	
						. 520	0034	0065	.0044	.0434	0079	
					,	,750	2337	4173	3900	3852	4076	
						רורוס		2824	3997	3855	3961	

ARC11-0141A19 OTS+STRUT SRB-NOM+MPS-NOM+VERTICAL

(REUV57) ( 19 CCT 74 )

#### REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRP = 976.0000 YMRP = .0000 ZMRP = 400.0000	IN. YT					ELV-IB = RUDDER = GIMBAL =	8.000 .000 1.000	ELV-CB = MACH =	4.000 1.250
SECTION ( 1).VERTICAL	CEPE	NCENT VA	RIABLE CP							
ALFHA ( 1) = -4.497 BETA	(1) = .003	Z/BV X/CV	-158	.316	. 6000	.940	.925			
		.000 .025	.7763 .2080	.6519 .0670	.6162 0673	.62 <b>73</b> 1064	.6248 1179			
		.050	.3657		0516					
		•150	3236	1994	.1239	.1388	.1032			
		•309	.1892	.1196	.1991	.1005	.0839			
		.520	.0178	.0163	.0283		0082			
		753	3635		4952					
		.900		4044	4884	~,5028	4760			
ALPHA ( 2) =339 BETA	(1) = -3.997	Z/BV X/CV	.158	-316	.600	.840	.925			
		.000	-6343	<b>→ 5685</b>	.5385	. 4866	.4825			
		.025	1022	2495	4253	6646	6741			
		.050	1211	2533	4255	6211	6013			
		-150	~.1038	2334	3995	4952	5963			
		•300			3096					
		• 520			2508					
		•7 <del>5</del> 0	4226		5455					
		.900		4653	5685	5507	5603			
ALPHA ( 2) =465 BETA	(2) = (2)	Z/BV X/CV	.158	.316	.600	.840	.925			
		.000	.7086	• 59 58	. 5353	.5423	.5377			
		.025	.1150	.0190	1040	1429	1553			
		•0 <i>5</i> 0	·2819	.0483	0890	0927	0913			
	* *	•150	.2645	1 541	.0710	.0893	∙0,655			
		300	.1440	.0705	.0440	.0495	-0331			
		.520		0295			0491			
		. 750	3841		5.199					
		•900		4313	5045	<b>-</b> ₁5153	5142			
ALPHA ( 2) =435 BETA	(3) = 4.031	Z/BV X/CV	.158	.316	. 600	-840	.925			
		.000	6322	.4899	.4197	.4435	.4388			
		.025	.5108	4210	.2962	-3141	.3481			
		-0.50	-5189	4015	.3285	.3168	.3018			
		-150	.4039	.3192	.2793	.2879	.2360			
		•300	2655	.2182	.2174	-2132	.1492			
	•	- 520	.1925	.0926	.0950	.1239	0058			
		. 750	3852	4587		4831				
		.900		3840	4289	4686	5197			



PAGE 913

# ARC11-D14IA19 OTS+STRUT SRB-NOH+MFS-NOH+VERTICAL

(REUV57)

SECTION ( 1) VERTICAL

DEPENDENT VARIABLE CP

900

-.4317 -.5264 -.5280 -.5288

ALPH	A E	3)	<b>=</b>	3.636	BETA	(1)	= .003	Z/BV X/CV	.158	.316	• 600	.840	.925
								.000	.7057	.5342	.4557	.4544	. 4578
							•	.025	.0265	0301	1438	1809	1846
								.050	.2673	0232	1344	1315	1328
								.1.50	2026	.0895	.0192	.0419	.0167
								.300	.0816	.0188	0015	.0009	0126
								• 520	0754	0772	0693	0350	0883
								.750	3917	5516	5300	5325	5539

ORIGINAL PAGE IS OF POOR QUALITY )

4.000 1.400

ARC11-D14IA19 OTS+STRUT SRB-LCW MPS-NCM VERTICAL (REUV58) ( 19 OCT 74 )

#### REFERENCE DATA

## PARAMETRIC DATA

SREF	= 2690.0000 SQ.FT.	XMRP = 976.000	M IN. XT					ELV-18 =	8.000	ELV-CB =
LREF	= 1290.3000 IN.	YMRP = .000	M IN. YT					RUDDER =	.000	MACH =
	= 1290.3000 IN.	ZMRP = 400.000	10 IN. ZT					GIMBAL =	1.000	
SCALE	T									•
	- ********									
SECTI	ON ( 1) VERTICAL	DE	EPENDENT VAI	RIABLE CP						
		•								
AL PHA	( 1) 2 -4.155 BETA	(1) = .000	Z/BV	. 1 58	.316	600	.840	.925		
			X/CV							
			.000	.7817	.7202	.6621	.6694	.6699		
			.025	.2188	.1559	.0158	0358	0478		
			.050	-3114	.1657	.0291	.0217	.0144		
			.150	.3862	.2618	.1959	.2007	.1669		
			300	.2495	.1889	.1609	.1722	-1544		
			.520	.0895	.0886	.1012	.1333	.0858		
			.753	3150	3677	~.3447	3457	3650		
			.900		3721	3453	3500	3435		
10										
ALPHA	(2) =342 BETA	(1) = 4.028	Z/BV	1 58	.316	. 600	.840	.925		
		* •	X/CV							
			.000	. 6689	. 5335	.4882	. 5.133	.5116		
			.025	. 5122	.4594	.3461	.3533	.3969		
			.050	. 5298	4384	.3785	.3691	.3692		
			.150	.4285	.3631	.3303	.3419	-3044		
			•300	.3023	.2627	.2739	.2830			
			• 520	.1465	-1582	.1789	-2173			
			.750	3251	3321	3156	3293			
			.900		3255	3011	3229	3714		



PAGE 915

4.000

1.250

.oooo IN. YT

ARC11-D14IA19 OTS+STRUT SRB-NOM MPS-OFF VERTICAL (REUV59) ( 19 OCT 74 )

## REFERENCE DATA

LREF = 1290.3000 IN. YMRP =

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

#### PARAMETRIC DATA

ELV-18 =

RUDDER =

8.000 ELV-CB =

BREF = 1290.3000 IN. SCALE = .0200	ZMRP = 40	0.0000 IN. ZT					GIMBAL =	1.000	
SECTION ( 1) VERTICAL		DEFENDENT VAI	RIABLE CP					•	
ALPHA ( 1) = -4.080 BETA	(1) = .012	2/8V X/CV	.1 58	.316	•600	.840	.925		•
		.000	.7749	. 6528	.6182	.6287	.6236		
		.025	.2161	.0791	0607	0998	1144		
		.050	.3660	.1040		0485	0562		
		-150	.3286	-2053	.1280	.1444	.1065		
		•300	.1910	.1259	1063	.1062	.0866		
		521	.0224	.0227		.0611	0022		
		.750	2806		4839				
		.900		•	4773				
ALPHA ( 2) =375 BETA	(1) = .012	Z/BV X/CV	158	.316	.600	.840	.925		
		.000	. 71 55	.6117	. 5470	.5526	• 5499		
		.025	.1280	.0425	0952	1281	1369		
		.050	.2886	.0658	0777	0709	0822		
		.150	.2764	.1719	.0856	.1009	.0756		
		.300	·1 59D	.0805	.0586	.0630	.0457		
		. 520	0083	0196	0092	.0250	0363		
		. 750	2817	5106	4942	4987	5189		
		.900		3199	4886	4982	4882		
ALPHA ( 2) =333 BETA	(2) = 4.031	z/BV X/CV	-158	.316	.609	.840	.925		
		.000	.6296	.4933	.4244	.4455	.4410		
		.025	5005	.4155	.2918	-3101	-3448		
		.050	.5147	.3957	.3239	.3132	.2966		
		.150	.3962	-3131	.2789	.2854	.2328		
		.300	.2600	-2183	.2176	.2116	.1487		
		- 520	.0955	.0943	.0949	.1230	0029		
		. 750	2913	4545	4536	4788	5221		
		.900		3065	4275	4660	5155		

O.A	TF	Ωı	MAY	78

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-HI MPS-NOM VERTICAL

(REUVED) ( 19 OCT 74 )

## REFERENCE DATA

# PARAMETRIC DATA

SREF	=	2690.0000 \$Q.FT.	XMRP	=	976.0000 IN. XT		ELV-18	=	8.000	ELV-CB :	<u>-</u>	4.000
LREF	=	1290.3000 IN.	YMRF	=	.0000 IN. YT		RUDDER	=		MACH :	E	1.250
BREF	=	1290.3000 IN.	ZMRP	=	400,0000 IN. ZT		GIMBAL	=	1.000			
CCAL F									•			

# SECTION ( 1) VERTICAL

ALPHA ( 1) = -4.122 BETA ( 1) = .012	Z/BV X/CV	.158	-316	.600	.840	.925
	+000	.7796	. 6527	.6240	.6337	.6281
	.025	.2006	.0709	0580	1065	1198
	.050	.3547	.0989	0508	0542	0622
	-150	-3234	.5055	-1290	-1406	.1015
	-300	.1866	.1259	-1041	.1051	.0843
	• 520	.0201	.0228	.0316	.0607	0014
	.750	3450	4968	4840	4912	5048
	.900		3824	4765	4913	~.4673





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#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 917

ARC11-0141A19 OTS+STRUT SRB-CFF MPS-CFF EXT TANK

(REUT01) ( 22 OCT 74 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF	8	2690.0000 SQ.FT.	XMRP.	•	976.0000 IN.	ΧŦ	ELV-IB =	8.000	ELV-OB	=	4.000
 LREF	*	1290.3000 IN.	YMRP	=	.0000 IN.	YT	RUCCER =	.000	MACH	=	.900
BREF		1290.3000 IN.	ZMRP	=	400.0000 IN.	ZŤ	GIMBAL =	1.000			
SCALE	=	.0200									

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

ALPHA (1) = -3.993 BETA (1) = .000	X/L	. 634	.742	.851	.986		
	FHI .000			nnee	2717		
	30.000		- 1136	0135			
	60.000			0139			
	90.000	0418		.0084	.1947		
	120.000	10410		0216			
	135,000			0361	.2286		
	150,000		.0098	.0860	.1216		
	165.000		0144		1019		
	195.000				1614		
	210.000				- 0245		
	225.000			0254	.2596		
	240.000				0155		.1
	270,000	0453	~.0382		.1750		č
	300.000				1916		<b>4</b>
	330.000				3087		ALITA
MANA ( 0) - 046 (000) ( 4) - 4 000	V.21	67.4	740	o ta	006		Z
ALPHA (2) =216 BETA (1) = -4.006	X/L PHI	. 634	.742	.851	.986		
					2554		
	000. 000-00		0839				
					2920		
	60.000	.0204	0363		2221		
	90,000	.0204	0322	0256	.1259		
	120,000		.1150	.1395	.1742 .4920		
	135,000 150,000		1291	•1330 •2894	.4920		
			.1567				
	165.000		.1128	.2408	.1190		
	195,000				2162		
	210.000				0923		
	225.000			0751	-1590		
	240.000	4000	4057		0391		
	270,000	1098	1053		.1749	•	
	300,000				1891		
	330.000			0106	2857		
ALPHA (2) =336 BETA (2) = .006	X/L	634	.742	.851	.986		
	.000			.0149	2655		
	30.000	,	1291	0043	2943		
	0.000		0972		2324		
	90.000	0547	0432		.2157		
	120.000		.0200	.0335	.0983		

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ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF EXT TANK

(REUTO1.)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	TABLE CP			
ALPHA (2) =336 BETA (2) = .006	X/L PHI	. 634	.742	.851	.986
	135,000		.0285	.0052	.3409
	1 50 -000		.0340	.1289	-1411
	165.000		-0055	.0890	0838
	195,000			.0443	1315
	210.000			.1166	.0190
	225.000			.0212	.3526
	240,000			.0255	.0631
	270,000	0545	0457	0182	.2032
	300.000			0008	1951
	330,000			0042	2935
ALPHA (2) =222 BETA (3) = 4.025	X/L	. 634	.742	.851	.986
	FHI				
	.000			.0021	2560
	30,000		1475	0142	2847
	60.000		1373	0366	2249
	90.000	1098	1194	0343	.2221
	120,000		0947	0840	0557
	135,000		1139	0834	.0665
	150.000		1537	0370	0188
	165,000		2295	0643	1988
	195.000			-2058	•1340
	210,000			2040	1191
	225,000			.1259	.3750
	240,000			.1248	.0929
	270 .000	.0144	.0323	÷.U135	.1118
	300 (000			.0268	- 1847
	330+000			-0013	2902
ÁLPHÁ (3) = 3.948 BÉTA (1) = .000	X/L PHÍ	-634	.742	.851	.986
	.000			.0126	2486
of the second	30.000		1473	0088	2881
	en.000		1141	0226	2256
	90,000	÷.0552	0651	0944	.1069
	120,000		.0394	.0730	.1255
	135.000		.0539	10/35	.4210
	150.000		.0577	1689	.1720
	165,000		.0371	.1256	0621
	195,000		10011	.0845	1124
	210.000			.1538	.0359
	225.000			.0638	.3923
	240.000			.0705	.0705
	270,000	- 0552	0832		.0944
	300,000	*** 325		0129	1855
	Trici e cirici			*****	• \$ (0.55)



DATE DI MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUTO1)

SECTECH ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.948 BETA ( 1) = .000

X/L .634 .742 .851 .986

HI

330,000 -.0078 -.2859

# ARC11-0141A19 OTS+STRUT SRB-OFF MFS-OFF EXT TANK

(REUTO2) ( 22 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

SCALE = .0200

SECTION ( 1) EXTERNAL TANK

#### DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK		DEPENDENT VAL	KIABLE CP			
ALPHA ( 1) = -4.176 BETA ( 1	000. = (	X/L FHI	.534	.742	.851	"986
		.000			-2235	.0020
		30,000	•	.0434	.2136	.0119
		0.000		.0663	.2122	.1075
		90.000	0928	.0729	.2073	.3915
		120,000		.1016	.1719	.1135
		135,000		.1141	.1789	.3194
		150.000		.0975	.2447	.2698
		165,000		.0549	.2105	.0476
		195,000			.1773	.0306
		210.000			.2194	.1361
		225.000			.1779	.3155
		240.000			.1512	.0889
		270.000	0810	.0621	1968	.3716
		300.000			.2168	.1631
		330,000			.2136	.0160
ALPHA ( 2) =294 BETA ( 1	) = -4.003	X/L	. 634	.742	.851	.986
		PHI				
		.000			.1981	.0156
		30.000		.0312	.2018	0201
		eo.ooo		-1004	.2214	.0122
		90.000	.1089	.1886	-2117	.2822
		120.000		.2557	3385	3673
		135,000		.2689	.3293	.6317
		1 50 .000		.2908	.4578	. 5234
		165-000		.2444	4220	-3166
		195,000			.£0385	0820
		210.000			.0632	.0232
		225.000			-0570	.2495
		240 -000			.0593	•0353
	*	270.000	0771	.0214	.1459	.2346
		300.000			.1592	.1331
		330,000			.1841	.0097
ALPHA (2) =252 BETA (2	9) = .009	X/L	. 634	. 742	.851	.986
		(H)				
		.000			.2096	.0160
		30,000		0431	.1985	.0061
		60.000		.0092	-2004	.0361
		90.000	0051	.1083	2301	.2747
		120.000		.1536	.2227	.2297

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# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUTO2)

SECTION ( 1) EXTERNA	L TANK		DEPENDENT VAR	TABLE CP				
ALPHA ( 2) =252	BETA ( 2) =	.009	X/L PHI	. 634	.742	.851	.986	
			135.000		.1611	.2294	.3999	
			150.000		.1534	.3019	.3168	
			165,000		.1185	.2627	.0892	
			195,000			.2285	.0737	
			210.000			.2703	.1819	
			225,000			.2230	.3991	
			240.000			.2029	.1646	
		•	270 .000	.0036	.0986	.2259	.2793	
			300.000			.2086	.1063	
			330.000			.1985	.0135	
ALFHA ( 2) =225	BETA ( 3) =	4.028	X/L	. 634	.742	.851	.986	
			PH]					
			.000			.1927	.0183	
			30.000		.0237	.1807	•0063	
			60.000		.0143	.1427	.0912	
			90.000	0755	.0018	.1149	.2497	
			120,000		0108	•0066	.0227	
			135,000		0494	0185	.2143	
			150.000		1019	0351	.0213	
			165.000		1153	0429	1078	
			195.000			.3843	-3133	
			210.000			.4250	.3155	
			225.000			.3181	5080	
			240.000			.2996	.2928	
			270.000	.1120	.1814	.2091	.2735	
			300.000			.2224	.0479	
			330.000			.2004	0178	
ALPHA ( 3) = 4.026	BETA (1) =	.000	X/L	634	.742	.851	.986	
mp) ( m = 41000			PHI					
			.000			.1772	.0120	
			30.000		0376	.1671	0188	
			60.000		.0239	.1612	0070	
			90.000	.0854	.1169	.1492	.2554	
			120.000		.1888	.2766	.2889	
			135.000		.2017	2728	.4477	
			150.000		.2013	.3366	-3319	
			165.000		.1792	39149	1069	
			195,000			2759	.1066	
			210.000			.3166	1904	
	100		225.000			.27:12	.3655	
			240.000			.2601	.2160	
			270.000	.0903	.1128	.1480	.2473	
				1113113	.1150	.1659	.0232	
			300.000			11039	111636	

•

DATE OF MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-0141A19 OTS+STRUT SRB-OFF HES-OFF EXT TANK

(REUTO2)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 4.026 BETA ( 1) = .000

X/L .634 .742 .851

FH)

330.000 .1670 -.0130

ANTHOR TO THE POST OF THE POST



DATE DI HAY 75

# TABULATED SCURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 923

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUTO3) ( 22 OCT 74 )

#### REFERENCE DATA

# PARAMETRIC DATA

LRI BRI	EF = 2690.0000 SQ.FT. EF = 1290.3000 IN. EF = 1290.3000 IN. ALE = .0200	YHRF = .	0000 IN. XT 0000 IN. YT 0000 IN. ZT					ELV-IB = RUDDER = GIMBAL =	8,000 ,000 1,000	ELV-CB = MACH =	4.000 1.250
S	ECTION ( 1) EXTERNAL TANK		DEFENDENT VA	RIABLE C	3						
AL	PHA ( 1) = -4.382 BETA	(1) = .003	X/L FHI	. 634	.742	.851	.986				
			000			.0586	.0658				
			30,000		1955	.0117	.0488				
			60.000		1235	0156	.0375				
			90,000	0606		.0378	.2762				
			120,000		0659	.0408	.2647				
			135,000		0656		.4116				
			150,000		0763	.1841	-3305				
			165,000		2009	.1648	.1365				
			195,000			.0881	-0458				
			210.000			.1385	.1469				
			225.000			0409	.3579				
			240.000			0223	.2081				
			270.000	0643	0878	.0209	.2652				
			300,000			0198	-0653				
			330.000			.0071	.0559				
ALF	PHA ( 2) =291 BETA	(1) = -3.997	XVL	.634	.742	.851	.986				
			.000			.1859	.11968				
			30,000		0954	.1859	.0644				
			60 - 0000		0218	.21 42	.0962				
			90.000	.0410	0103	.1285	.3366				
			120.000		17894	.3505	48 58				
			135,000		.0970	.3346	.6382				
			1 50 - 000		∙0965	.4455	.5817				
			165.000		.0050	.4240	.3983				
			195.000			0189	0946				
			210.000			.0147	0065				
			225.000			0697	.2800				
			225.000	1341	2167	0697	.2800				
			225-000 240-000	1341	2167	0697 1121	.2800 •1709				
			225,000 240,000 270,000	1341	2167	0697 1121 .0161	.2800 .1719 .3863				
ALF	HA ( 2) =177 BETA	) = .016	225,000 240,000 270,000 300,000	1341	2167	0697 1121 .0161 .0939	.2800 .1709 .3863 .0797				
ALF	HA ( 2) =177 BETA	610. = (S)	225,000 240,000 270,000 300,000 330,000 X/L FHI			0697 1121 .0161 .0939 .1885	.2800 .1709 .3863 .0797 .0883				
ALF	HA ( 2) =177 BETA	(2) = .016	225.000 240.000 270.000 300.000 330.000 X/L PHI .000		.742	0697 1121 .0161 .0939 .1885 .851	.2800 .1709 .3863 .0797 .0883 .986				
ALF	HA ( 2) =177 BETA	010. = (S)	225.000 240.000 270.000 300.000 330.000 X/L FHI .000 30.000		.742 1905	0697 1121 .0161 .0939 .1885 .851	.2800 .1709 .3863 .0797 .0883 .986				
ALF	HA ( 2) =177 BETA	(2) = .016	225.000 240.000 270.000 300.000 330.000 X/L PHI .000	. 634	.742	0697 1121 .0161 .0939 .1885 .851	.2800 .1709 .3863 .0797 .0883 .986				

-.0673 .1670 .3278

# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUTOS)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARIABLE CP	
ALPHA ( 2) =177 BETA ( 2) = .016	X/L .634 .742 .	.851 .986
	135.0000492	1420 4915
		2637 .3887
		2363 .1837
		1588 .0992
		2022 .2068
		1177 .4152
	-,	.1161 .2669
		.0392 .4554
		1114 -1034
	<del></del>	1923 .0782
ALPHA ( 2) =366 BETA ( 3) = 4.031	X/L .634 .742	.851 .986
		1768 .0986
		1746 .0782
	• • • • • • • • • • • • • • • • • • • •	.0926 .0583
		0011 3558
		1136 .1498
		1367 .1878
		.0456 .0246
		0845 - 1060
		3646 .3838
		3825 .3558
		3148 -5214
		2873 4006
		1134 .3260
		2073 -1157
		1767 .0667
ALPHA (3) = 3.843 BETA (1) = .003	X/L .634 .742 . PHI	851 .986
	.000	2491 17959
•	30.0001836 .	2219 .URI)?
	60.0001110	2032 .0952
	90.00003021106 .	10990 .3264
	120.0000365	2789 .3582
	135.0000146 .	2787 .4722
	150.0000535	3389 4237
	165,0001477	3074 -2147
	195.000	2424 .1501
	210.000	2790 .2522
	225.000	2490 .4080
	240.000	2497 .2884
	270.00006201136 .	.0688 .3386
		2018 .1094



DATE OI MAY 75

TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 925

ARC11-0141419 OTS+STRUT SRB-OFF MPS-CFF EXT TANK

(REUTO3)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.843 BETA ( 1) = .003

X/L PHI .742

.986

339,000

.2192 .0669



ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUTO4) ( 22 OCT 74 )

#### REFERENCE DATA

## PARAMETRIC DATA

•			129	0.0000 0.3000 0.3000 0.200	IN IN		XM YM ZM	RP	= = = = = = = = = = = = = = = = = = = =		0000. 0000. 0000.	IN.	YT					ELV-18 RUCCER GIMBAL	=	8.000 .000 1.000	ELV-CB MACH	=
	SECTI	ION	( 1	EXTER	NAL	TANK					DEP	ENDE	NT VA	RIABLE CP								
	ALPHA	<b>(</b> , ;	1) =	-3.90	6 1	BETA	( 1	) =		009		X/		.634	.742	.851	.986					
												PH										
													.000			0012	.0103					
													.000		1456		.0106					
													.000				.0432					
												90	0.000	0236	0561	0191	. 4771					
												120	0.000		0452	0077	.3297					
												135	0.000		0779	2033	. 4914					
												150	.000		1159	.1847	.3992					
												165	0.000		1259	.1591	-2066				•	
												195	0.000			.0839	.0971					
												210	0.000			.1110	.1852			,	$\sim$	
												225	000			0480	.3599			Q'	FD.	
												240	0.000			0088	.2596			127	6	
												270	.000	0779	0704	0510	.4943			<b>₩</b>		
												300	0.000			0662	.0489			ç	5号	
												339	.000			0454	.0022			,	可让	
	ALPHA	( )	2) =	20	14. 1	BETA	(1	) =	-4.	000		X/ FH		.634	,742	.851	.986				OBJUSTICE PAGE	Ļ
													.000			1841	.0415					-)
												39	.000		0675	0217	.0104				- F3 1	4
												æ	.000		.0038	.0308	.0425				Yes	•
												90	.000	.0111	.0032	.0214	.3025					
													.000		1256	-3143	.5323					
												135	.000		.1335	.2954	- 5854					
													.000		-1334	.3999	.6431					
													.000		.1269	.3884	.4985					
													.000			0133	0653					
					, •								.000			0017	.0080					
													.000			0909	.2771					
													.000			0918	.2183					
													.000	0884	1545		.3471					
													.000	11.004		- 1389	.0354					
													.000			0542	.0422					
	ALPHA	( )	?) =	30	6 i	BETA	( 2	)	•	016		X/		. 634	.742	.851	.986					
													.000			.000 <b>7</b>	.0251					
												400	171717		4 3 000	- D70E	0244					
												311	.000		1462	_•0000	·D341					
													.000			0564	.0341					

120.000

-.0171 .1218 .3945



# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

NK (REUTO4)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	TABLE CP				
ALPHA (2) =306 BETA (2) = .016	X/L FHI	. 634	.742	.051	.986	
	135.000		0427	0474	. 51 77	
	1 50 .000		0728	.2439	.4384	
	165.000		1058	.2194	.2473	
	195.000			.1406	.1491	
	210.000			1688	2350	
	225,000			.0583	4000	
	240.000			.0563	3041	
	270.000	0495	0751	0739	3978	
	300.000	11.45,5		0605	.0620	
	330.000			0363	.0285	
ALPHA (2) =267 BETA (3) = 4.031	. X/L	634	.742	.851	.986	
	PHI					
	.000			0001	.0458	
	30.000		2075	0572	.0412	
	000,000		1492	1497	.0164	
	90.000	0592	1574	0844	.2846	
	120,000		1874	0465	.1941	
	135,000			1154	.2029	
	150,000		2053	.0262	-1105	
	165.000		2851	0131	0383	
	195,000			-3372	.4621	
	210.000			.3559	.4067	
	225.000			.2754	45.12	
	240.000			.2757	4230	
	270.000	.0051	0031		.2383	
	300.000		******	.0259	.0594	
	330,000			0160	.0109	
	SSUTTER			- 101 (0)	10103	
ALPHA ( 3) = 4.392 BETA ( 1) = .012		. 634	.742	.851	.986	
	FHI			0700	4661	
	.000			.0300	.1661	
	39.000		1499	0064	.1339	
	60.000			0213	.0635	
	90.000	.0097	0826	+.0787	.1604	
	120,000		0013	.2213	.4166	
	135.000		.0071	.1447	. 539.7	
	150.000		0068	.31 77	.4609	
	165.000	*	0697	.2867	.2689	
	195.000			.2329	.2104	
	210.000			.2608	.2985	
	225.000			.2077	.4221	
	240.000			.2091	.3428	
	270,000	0090	0993	1271	.1447	
	300.000			0192	-0710	
•						

DATE DI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 928

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUTO4)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALFHA ( 3) = 4.392 BETA ( 1) = .012

X/L .634 .742 .851 .986

PHI

330,000

-.0082 .1366

OF POOR QUALITY



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DATE OI MAY 75
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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 929

4.000

# ARC11-014TA19 OTS+STRUT SRB-NOW MPS-NOW EXT TANK

(REUTO5) ( 22 OCT 74 )

<b>ER EN</b> K	

## FARAMETRIC DATA

LREF = 1290.3000 IN. YMRP = .000 BREF = 1290.3000 IN. ZMRP = 400.000	00 IN. XT 00 IN. YT 00 IN. ZT			•		ELV-IB = RUCDER = GIMBAL =	8.000 .000 1.000	ELV-CE MACH
SCALE = .0200	errower VAR							
SECTION ( 1) EXTERNAL TANK	EPENCENT VAR	HABLE CP						
ALPHA ( 1) = +4.119 BETA ( 1) =006	X/L THI	-634	.742	.851	.986			
	.000			.0046	2706			
	30.000		1128	0106	3096			
	60.000		0802	0149	2454			
	90,000	0482	0291	.0105	.1878			
	120,000		.0031	0224	.0212			
	135.000		.0116	0360	.2301			
	150.000		.0138	.0896	.1240			
	165,000		0131	.0464	1186			OF C
	195,000			.0020	1690			7 2
	210,000			.0784	0252			P S
	225,000			0224	-2583			8z
	240.000			0620	0208			ž A
	270.000	(151)6	0368	0030	.1732			× 5
	300.000			0093	1950			H H
	330.000			0142	3088			AA
								日記
ALPHA (2) =306 BETA (1) = -4.000	X/L PHI	. 634	.742	<b>₊851</b>	.986			ORIGINAL PAGE IS
	000			.0126	2426			
	30,000		0816	.0099	2829			
	60,1000		0338	.0257	2227			
	90.000	.0221	.0362	0136	.1325			
	120,000		.1181	1436	.1787			
	135.000		.1294	.1378	. 4949			
	150.000		.1584	.2944	.3692			
	165,000		.1140	.2478	.1170			
	195,000			0498	2197			
	210.000			0498	0884			
	225.000			0764	.1626			
	240.000			0992	0321		,	
	270.000	1076	0990	0195	.1743			
	300.000			0203	1788			
	330.000			0070	2754			
ALPHA (2) =264 BETA (2) = .016	X/L PHI	. 634	.742	.851	.986			
	.000			.0166	- 2599			
	30.000		- 1309	0035	2893			
	60.000		0957	0076	2409			
	90.000	0578	0441	0106	.2991			

120,000

.0172 .0334

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUTOS)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	IABLE CP			
ALFHA (2) =264 BETA (2) = .016	X/L PHI	. 634	.742	.851	.986
	135.000		.0282	.0052	.3447
	1 50 .000		.0392	.1344	.1580
	165,000		.0054	.0915	0933
	195,000			.0351	1536
	210,000			.1070	.0044
	225,000			.0145	.3470
	249,000			0221	.0553
	270.000	0639	0496	0189	.2020
	300,000			0062	1986
	330.000			0062	2887
ALPHA ( 2) =348 BETA ( 3) = 4.028	X/L	-634	.742	.851	.986
	FHI			0198	2811
	.000		4 2 40		3128
	30.000		1540	0578	2421
	60.000	4400			.2368
	90.000	1192	1347	1089	0600
	120.000		1049	1087	.0610
	135.000		1210 1564	0568	0221
	1 50 .000		2280	0851	2147
	165,000		2200	.1880	.1060
	195,000				.0935
	210.000			.2458 .1140	3570
	225.000			.0751	.0692
	240.000	13/200	D403	0360	.0976
	270,000	.0089	.0195		2109
	300.000				3160
	330 .000			uirr	5100
ALPHA ( 3) = 3.924 BETA ( 1) = .000	X/L PHI	. 634	.742	.851	.986
	.000			.0086	2463
	30.000		1591	0091	2895
	60.000		1260	0233	2383
•	90,000	0559	-:0709	0972	.0961
	120.000		.0349	.0693	.1215
	135.000		.0508	.0469	.4189
	150.000		.0565	.1677	1623
	165.000		.0315	1278	0861
	195.000			.0800	1187
	210,000			-1510	.0298
	225.000			.0603	.3965
	240.000			.0272	.0743
	270.000	0585	0849	1932	.0961
	300 -000			0199	1947



DATE D1 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 931

ARC11-0141A19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUTOS)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CF

ALPHA ( 3) = 3.924 BETA ( 1) = .000

X/L .634 .742 .851 .986

PHI 330.000

-.0112 -.2857

4.000

1.100

# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUTO 6) ( 22 OCT 74 )

ELV-CB =

MACH =

#### REFERENCE DATA

# PARAMETRIC DATA

	SREF = 2690.0000 S LREF = 1290.3000 B BREF = 1290.3000 B SCALE = .0200	N. YMRF	= .00	990 IN. XT 999 IN. YT 999 IN. ZT					ELV-IB = RUCDER = GIMBAL =	8,000 000 1,000	
	SECTION ( 1) EXTERNA	L TANK	. (	DEPENDENT VA	RIABLE C	P					
	ALPHA ( 1) = -4.074	BETA (1) =	.000	X/L	. 634	.742	.851	.986			
				HI							
				.000			.2272	.0049			
				30,000		.0429	.2173	·D1 54			
				60.000		.0653	-2169	.1162			
				90.000	0905	.0765	.2121	.4948			
				120,000		.1059	.1778	.1193			
				135,000		.1179	.1835	.3299			
				150.000		.1037	.2503	.2796			
				165.000		.0657	-2149	.0547			
				195,000			.1776	.0352			
				210.000			.2210	.1346			
				225.000			.1789	-3142			
				240.000			-1518	•0920			
				270.000	0853	.0613	.1984	.3776			
				300,000			.2198	1663			
				330.000			-2156	.0194			
	ALPHA ( 2) =396	BETA ( 1) =	-4.003	X/L FHI	634	.742	.851	.986			
		. •		.000			-2019	.0194			
-				30.000		.0332	-2058	0160			
				60.000		-1026	.2257	.0173			
				90,000	-1075	.1907	.2199	.2886			
				120.000		.2546	.3378	.3672		•	
				135,000		2668	.3283	6323			
				150.000		2904	4561	.5252			
				165.000		.2434	.4225	,3170			
		-		195,000			.0377	0748			
				210.000			.0648	.0291			
				225.000			.0621	.2513			
				249.000			.0588	.0359			
				279.009	0773	.0240	1509	.2374			
				300.000			1 661	.1497			
				330.000			.1895	·D149		•	
				001/11/1/2/			•1033	*51145			
	ALPHA ( 2) =408	BETA (2) =	.009	X/L FHI	. 634	.742	.851	.986			
				.000			.2101	.0172	•		
				30.000		0442	-1996	.0082			
				60.000		0066	-5056	.0457			
				90.000	0124	1008	-2333	2697			
				120.000		.1472	.2238	.2183			
						*****	- 22.00				



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# ARC11-014TA19 OTS+STRUT SRB-NON MFS-NOM EXT TANK

(REUTO6)

						11-0141A19 O				
SECTION ( 1)	EXTERNA	L TANK				DEPENDENT VA	RIABLE CP			
ALPHA ( 2) =	408	BETA	(.2)	=	.009	X/L	. 634	.742	.851	.986
						PHI				
						135.000		.1 568	.2294	. 4000
						1 50 . 000		.1467	.2975	.3211
						165.000		.1139	.2619	.0929
						195,000			.2396	.0709
						210.000			.2682	.1784
						225.000			.5556	.4013
						240,000			.2037	.1642
						270 .000	0038	.0925	.2272	.2858
						300.000			.2102	.1086
						330.000			.2022	.01 53
ALPHA ( 2) =	339	BETA	(3)	=	4.028	X/L	-634	.742	.851	.986
						PHI				
						.000			.1960	.0215
						30.000		.0229	.1851	.0110
						60.000		.0181	.1471	1005
						90,000	~.0782	.0029	.1147	.25@1
						120.000		0139	.0077	.0209
						135,000			0124	.2164
						150.000		0999	0292	.0249
						165.000		1110	0416	1006
						195,000			.3841	-3111
						210.000			.4253	-3171
						225.000			.3202	. 5784
						240.000			.2968	.2967
						270.000	1125	.1845	.2145	.2785
						300,000			.2264	.0532
		-				330 -000	*		-2038	0144
				_	.003	X/L	. 634	.742	.851	.986
ALPHA ( 3) =	5.984	BLIA	(1)	=	·(KI)	PHI	.604	1146		.500
						.000			.1772	.0136
						30.000		0363	1694	0186
						en .000		.0260	.1646	0031
						90.000	.0813	.1157	.1433	.2683
						120,000	10013	.1848	.2801	.2993
						135,000		.1998	.2796	.4524
						150,000		.1983	3424	.3372
						165.000		.1741	3081	.1099
						195.000		*****	.2768	.1126
					•	210.000			.3175	.1956
						225.000			.2739	.3622
						240.000			.2547	.2209
							.0852	.1098	.1459	.2539
						270.000	.0032	11/190	11439	• 2000

300.000

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DATE OF HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 934

ARC11-814TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUTO6)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.984 BETA ( 1) = .003

X/L

PHI

330,000

.1686 -.0118



DATE DI MAY 75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUTO7) ( 22 OCT 74 )

#### REFERENCE DATA

### PARAMETRIC DATA

SREF	=	2690.0000 SQ.FT.	XMRP	=	976.0000 IN.	ΧT	ELV-18 =	8.099	ELV-CB =	
LREF	=	1290.3000 TN.	YMRP	. =	.0000 IN.	YT	RUDDER =	.000	MACH =	1.257
BREF	=	1290.3000 IN.	ZMRF	= -	400.0000 IN.	ZT	GIMBAL =	1.000		
SCALE	=	.0200	•							

SECTION ( 1) EXTERNAL TANK

#### DEPENDENT VARIABLE CP

ALPHA ( 1) = -4.131 BETA ( 1) = .003	X/L	. 634	.742	.851	.986	
	PHI			-0130	.0660	
	.000		- 4043	0274	.0569	
and the state of t	30.000		1943 1218		.0373	
	60.000	- 004.4	0975	0413	2711	
	90.000	0614		.0271	.2661	
	120,000		0662	0272	-4131	
	135.000		0681		.3462	
	150,000		-,0706	.1856	.1434	
	165,000		1991	.1659		
	195,000			.0886	.0531 .1467	
	210,000			0450	3543	
	225,000				2097	
	240.000	- 0004	- 0044	0238	.2624	
	270.000	0621	0911	- 0170		
	300.000			0328	.0615	
	330.000			0276	.0633	
ALPHA (2) =300 BETA (1) = -4.000	X/L	. 634	.742	.851	.986	
	PHI					
	.000			.1788	.1016	
	30.000		0960	.1965	.0714	
	60.000		0234	-2125	17991	
	90.000	.0371	.0139	1117	.3307	
	120,000		.0909	3498	4878	
	135.000		.0982	.3229	.6426	
	1 50 .000		.0971	.4413	.5882	
	165.000		.0131	.4176	4019	
	195,000		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0145	0905	
	219.000			.0029	0065	
	225.000			0733	2802	
	240.000			1234	.1731	
	270.000	1314	2150	0077	3897	
	300.000	-11314		0720	.0829	
	330,000			.1 569	.0937	
	330 . (KK)			•1 309	•:1931	
ALPHA (2) =411 BETA (2) = .012	X/L PHI	. 634	.742	.851	.986	
	.000			.1719	.0842	
	30.000		1860	.1689	.0867	
	60.000		1193	1031	.0898	
	90.000	0542	1080	-0503	.4287	
	120.000		0658	1654	.3323	

ORIGINAL PAGE IS OF POOR QUALITY ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM EXT TANK

(REUTO7)

SECTION ( 1) EXTERNA	L TANK			DEPENDENT VAR	TABLE CP			
ALPHA ( 2) =411	BETA	( 2) I	.012	X/L	. 634	.742	.851	.986
				135.000		0492	.1298	.4944
				1 50 .000		0500	.2656	.3974
				165,000		1769	.2393	.1908
				195.000			.1637	1077
				210.000			.2015	.2164
				225.000			.1169	. 4251
				240.000			.1063	.2757
				270.000	0640	1036	.0181	. 4528
				300.000			.0837	1091
				330.000			.1568	.0882
ALFHA ( 2) =438	BETA	(3) =	4.031	X/L PHI	. 634	.742	.851	.986
				.000			.1691	.0987
				30.000		2643	-1504	.0841
				eo .coo		2158	.0663	.0617
				90,000	1087	2442	0088	.3475
				120.000		2290	1152	.1587
				135.000		1518	1493	.1901
				150,000		1513	0361	.0326
				165.000		1699	0749	0944
				195-000			.3551	.3817
				210.000			.3770	3636
				225,000			3019	. 5008
	•			240.000			.2812	.3951
				270 .000	.0299	.0104	.1078	.3268
				300,000			.2068	.1167
				330 -000		*	.1867	.0714
ALPHA ( 3) = 3.582	BETA	(1) =	.003	X/L PHI	.634	.742	.851	.986
				.000			.2448	.0982
				39.000		1844	.2238	.0673
				60.000		1145	.2006	1023
				90.000	0374		.0764	.3328
				120.000		0438	.2662	.3610
				135,000	1.5	0260	2692	4733
				150.000		0629	3320	4180
				165.000		1562	.2988	.2115
				195,000			.2349	.1540
				210.000			.2716	.2559
				225.000			.2413	.4075
				240.000			.2256	.2922
					_ nma	- 4404	.0554	.3434
				270.000	0624	1191	.1999	.1143
				300.000			.1232	*1145

DATE OI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 937

ARC11-014TA19 OTS+STRUT SRB-NCM MPS-NCM EXT TANK

(REUTO7)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA (3) = 3.582 BETA (1) = .003

. X/L

.742

.985

PHI

330.000

.0706 .2239

.851

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(REUTOS) ( 22 OCT 74 )

PAGE 938

#### REFERENCE DATA

PARAMETRIC DATA

SREF =	2690.0000 SQ.FT.	XMRP	z	976-0000 IN. XT	ELV-IB =	8.000	ELV-CB =	4.000
LREF =	1290.3000 IN.	YMRF	=	.0000 IN. YT	RUCDER =	.000	MACH =	1.400
BREF =	1290.3000 IN.	ZMRP	=	400.0000 IN. ZT	GIMBAL =	1.000		

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

SECTION ( TIENTONIA	LIANA			UEITE	ADEIAI AW	CIADLE CI			
ALPHA ( 1) = -4.017	BETA	(1) =	.006		X/L PHI	.634	.742	.851	.986
					.000			0027	.0094
					30.000		1435	0474	.0001
					00.000		0780	0741	.0296
					90.000	0253	0569	0118	. 4821
				-	120.000		0475	.0131	.2885
					135.000		0817	0855	.4489
					150.000		1196	.1865	.3989
					165.000		1261	.1637	-2164
					195.000			.0825	.0959
					210.000			-1084	1821
					225.000			0502	3561
				:	240 .000			0129	.2615
					270.000	0777	0696	0485	.4860
					300.000			0681	.0468
					330 .000			0483	0008
ALFHA ( 2) =486	BETA	(1) =	-4.000		X/L	.634	.742	.851	.986
					PHI				
					.000			0063	.0350
					30.000		0702	0261	-0100
					60.000		.0009	.0246	.0432
					90.000	.0076	.0023	.0211	30.65
				:	20.000		.1237	.3099	. 5246
				:	135.000		.1271	.2877	. 5811
				:	E 90 - 000		.1265	.3881	.6369
				1	165.000		.1296	.3775	. 493!7
				:	195.000			0130	0614
				2	210.000			0036	.0112
					25.000			0960	.2739
				2	240.000			0990	-2157
				2	270 .000	0916	1557	1050	.3424
				3	300.000			1438	-0323
					000.055			0560	.0347
ALPHA ( 2) =438	BETA	(5) =	.016		X/L	. 634	.742	.851	.986
					[HI				
					.000			0011	.0201
					30.000		1491	0402	.0297
					60,000		0811	0622	.0457
					90.000	0267	0675	0176	.3874
				1	20.000		0227	-1133	3897
				-			:		



# ARC11-0141A19 OTS+STRUT SRB-NOM MIS-NOM EXT TANK

(REUTO8)

					ARC	11-ULALATS OFS	ratikot oji		- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
SECTION (	1)	EXTERNAL	TANK			DEPENDENT VAR	ABLE CP				
LPHA ( 2)	=	438	BETA	(5) =	.016	X/L	. 634	.742	.0 51	.986	
					• .	FHI		0495	- 051 B	. 51 78	
						135.000			.2392	.4346	
						150.000		0763	.2136	.2394	
						165.000		1153	.1410	.1599	
						195.000			.1654	.2370	
						210.000			.0515	.3976	
						225.000			.0754	3026	
			•			240.000	0.530	0735		.4953	
						270 -000	0532	#.u/35	0645	.0588	
						300 ,000 330 ,000			0399	.0269	
						V.A	. 634	.742	.851	.986	
ALPHA ( 2)	Ξ	456	BETA	(3) =	4.028	X/L	. 634	1142	.031		
						PHI			0020	.0386	
						.000		2142		.0339	
						30 .000 60 .000			1561	.0151	
						90.000	0638		0886	.2847	
						120.000	-1000		0528	.1856	
-						135,000			1176	.1937	
						150.000		2145	.0206	.0978	
						165.000		2915		0368	
						195.000		12333	.3270	.4476	
						210.000			.3488	.3937	
						225.000			.2637	.4398	
						240.000			.2381	4089	
						270.000	0017	0069	0396	.2404	
						300.000			.0189	.0560	
						330,000			0253	.0056	
ALPHA ( 3	) =	4.014	BETA	(1)=	.009	X/L	. 634	.742	.851	.986	
,						TH!			D4 60	4.500	
						.000			.0166	.1562	
						30,000			0182	.1298	
						60.000		0862	0311	.0737	
						90,000	.0040	0897	0736	.1623	
						120,000		0089	.2139	.4142	
						135,000		0083	.1187	.5321	
						150.000		0233	.3116	.4630	
						165.000		0805	.2823	.2720	
						195.000			.2224	.2068	
						210.000			.2478	.2912	
						225.000			-1925	.4198	
						240.000			.1797	.3399	
						270.000	0151	1057	1274	.1451	
						300.000			0346	.0554	

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DATE OI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 940

ARC11-0141A19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUTOB)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CF

ALPHA ( 3) = 4.014 BETA ( 1) = .009

X/L PHI

.634 .742 .851 .986

330.000

-.0222 .1318



DATE O1 HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 941

# ARC11-D141A19 OTS+STRUT SRB-LCW MPS-NCM EXT TANK (REUTO9) ( 22 OCT 74 )

#### REFERENCE DATA

SREF # 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

PARAMETRIC DATA

EV-IB = 8.000 ELV-CB = 4.000

LREF = 1290.3000 BREF = 1290.3000 SCALE = .0200	IN. YMRP	* .000	D IN. YT					RUDDER = GIMBAL =	.000 1.000	MACH =	.900
SECTION ( 1) EXTERN	AL TANK	DE	PENDENT VA	RIABLE CP	r						
ALFHA ( 1) = -4.191	BETA ( 1) =	.000	X/L PHI	. 634	.742	.851	.986				
			.000			0025	2831				
			30.000		1191	0224	2966				
			60.000			0228	2114				
			90.000	0527	0390		.1852				
			120.000			0402	.0132				
			135.000			0585	.2761				
			150,000		.0039	.0818	.1205				
			165.000		0234	.0388	1131				
			195.000			0061	1893				
		•	210.000			.0687	0324				
			225,000			0326	.2490				
			240.000			0715	0304				
			270.000	0472	0442	0121	.1715	; ·		. •	
			300.000			0109	2026				
			330.003			0190	3164				
ALPHA ( 2) =438	BETA ( 1) =	-4.000	X/L FHI	. 634	.742	.851	.986				
			.000			-0053	2548				
			30,000		0894	.0018	2675	;			
			60.000		0378	.0198	1927				
			90.000	.0208	.0316	0141	.1187				
			120.000		.1081	.1299	.1635				
			135,000		.1198	-1031	. 5137	•			
			150.000		-1480	.2867	.3764				
•			165.000		1025	.2394	.1141				
			195.000			0565	2262				
			210.000			0451	0932				
			225.000	Ę.		0821	.1565				
			240.000				0392				
			270.000	1103	1067		.1823		*		
			300,000				1871				
			330.000				2897				
					*		,				
ALPHA ( 2) =525	BETA (2) =	003	X/L FHI	. 634	.742	.851	.986				
			.000			.0283	2538				
			30.000		1294	-0108	2609				
			eo.ooo		0931		1988				

90.000 -.0547 -.0422 -.0034 .2151

.0159 .0363 .0913

120.000

ARCTI-HIATATA OTS+STRUT SRB-LC	v MPS-NOM	EX1	IANK
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(REUTO9)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	TABLE CP			
ALPHA (2) =525 BETA (2) =003	X/L PHI	. 634	742	.851	.986
	135.000		.0302	0014	.3849
	150.000		.0316	.1429	.1481
	165.000		.0097	.1012	0920
	195,000			.0503	1317
	210.000			.1208	.0261
	225,000			.0279	.3589
	240.000			0096	.0677
	270.000	0571	0454		.2229
	300.000			.0099	1850
	330 .000			.0050	2777
ALPHA (2) =441 BETA (3) = 4.025	X/L	-634	.742	.851	.986
	PHI				
	.000			.0056	2564
	30,000		1479	0105	2631
	60,000		1414	0356	1844
	90.000	1133	1245	0348	.2266
	120.000		0990	0871	0663
	135.000		-,1185	0958	.1112
	150.000		1534	0424	0256
	165,000		2189	0700	2056
	195,000			.2021	.1302
•	210.000			.2625	.1193
	225,000			.1243	.3757
	240.000			.0887	0949
	270.000	.0149	.0298	0117	.1233
	300.000			.0280	1846
	330.000			0006	2832
ALPHA ( 3) = 4.050 BETA ( 1) = .006	X/L FHI	.634	.742	.851	.986
	.000			.0259	2350
	30.000		1483	0002	2553
	63.000		1163	0097	1928
	90,000	0556	0659	0831	.0993
	120,000		.0423	.0764	.1234
	135,000		.0588	.0390	. 4550
	1 50 ,000		.0629	.1795	.1720
	165.000		.0443	.1413	0672
	195,000		,,,,,,,	.0907	1055
	210.000			.1624	.0469
	225.000			.0766	.4046
	240.000			.0397	.0839
	270.000	יונים -	0790		.1142
	300.000	- 10370	*17 1 37.7	0071	1744
	الألبالية والمالي			******	* * * * * *

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DATE O1 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 943

ARCIE-BIATALE OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUTING)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 4.050 BETA ( 1) = .006

.742 .851 .986 X/L

PHI

.0042 -.2704 330.000

4.000

1.100

ARC11-0141A19 OTS+STRUT SRB-LCW MFS-NOM EXT TANK

90.000 -.0130 .1001

.1483

120.000

.2713

.2159

(REUT10) ( 22 OCT, 74 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

#### PARAMETRIC DATA

.000

1.000

8,000 ELV-CB =

ELV-18 =

	2690,0000 1290,3000 1290,3000	IN.	XMRP YMRP ZMRP	= .	.0000 IN. XT .0000 IN. YT .0000 IN. ZT					RUCDER = GIMBAL =
SECTION	( 1) EXTERN	AL TANK			DEPENDENT VA	RIABLE CP				
ALPHA C	1) = -3.978	BETA	(1)=	006	X/L	634	.742	.851	.986	
					PHI					
					.000			.5563	.0048	
					30.000		0466	.2176	.0152	
					60,000		.0661	.2171	.1122	
					90.000	0897	.0764	.2128	.3932	
					120,000		1064	.1787	.1161	
					135,000		.1169	1823	-3231	
					150.000		.1051	.2504	.2754	
					165.000		.0626	.21 58	.0538	
					195.000			.1784	.0347	
					210.000			.2211	.1368	
					225.000			.1891	.3137 .0897	
					240.000	0860	.0632	.1523 .2022	.3717	
			* -		270.000	0000	.0002	.2195	.1662	
					300 .000 330 .000			.2170	.0192	
					3301.0000			•E1 (0)	10132	
ALPHA (	2) =387	BETA	(1) =	-4.003	X/L	. 634	.742	.051	.986	
					PHI					
					.000			.2022	.0190	
					30,000		.0336	-2054	0172	
					en.000		1023	.2248	.0167	
					90.000	.1056	.1895	-2184	.2932	
					120,000		.2559	.3384	.3723	
					135,000		.2674	•3302	.6339	
					1 50 .000		-2900	.4578	. 5254	
					165.000		.2440	.4233	.3170	
					195,000			.0436	0776	
					210.000	•		.0710	.0265	
					225.000			·D586	.2491	
					240.000			.0614	.0354	
					270.000	0775	.0224	.1512	.2412	
					300.000			.1663	.1380	
					330.000			.1899	.0149	
ALPHA ( )	P) =429	BETA	(2) =	.009	X/L	. 634	.742	.851	.986	
					FHI		· · · · · · ·			
					.000			.2082	.0172	
					30.000		0434	1988	.0082	
					60.090		.0064	2001	.0442	



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ARC11-014TA19	OTS+STRUT	SRB-LOW MPS-NOM EXT	TANK

(REUT10)

							C11-0141A19 Of	STSTRUE S	SKD-FCM I	MC⊃-14744 ;	EXI TANK		
SECTION (	1)E	XTERN	L TANK			DEPENDENT VARIABLE CP							
ALPHA ( 2)	=	429	BETA	( 5)	= -	.009	HI X/L	. 634	.742	.851	.986		
							135.000		.1535	-2250	.3947		
							1 50 .000		.1448	.2974	.3181		
							165.000		.1113	.2607	.0902		
							195,000		12213	.2280	0717		
							219.000			.2683	.1786		
						,	225.000			.2219	.3982		
							240.000						
							270.000	~.0016	.0926	-2039	.1637		
							300.000	(0.1)	10926	.2272	.2797		
							330.000			.2104	.1048		
							350 (0.00)			.2029	.0159		
LPHA (2)	=	384	BETA	( 3)	=	4.028	X/L	. 634	.742	.851	.986		
							PHI						
							-900			.1944	-0204		
							30,000		.0262	.1829	-0104		
							60.000		.0237	.1449	.0986		
			1 J				90,000	0774	0025	1117	.2566		
							120.000		0139	.0040	.0179		
							135,000		0512	0118	-21 52		
							150.000		1016	0294	.0237		
							165.000		1153	0413	1046		
							195,000			.3820	3/175		
							210,000			4208	-31 54		
		•					225,000			•31 59	. 5157		
							249.000			-2943	.2947		
100							270.000	•1080	.1813	-2147	2763		
							300.000			.2242	.0500		
							330 -000			-2007	0144		
LPHA ( 3)	<b>=</b>	3.930	BETA	(1)	=	.000	X/L PHI	. 634	. 742	.851	.986		
							.000			.1764	.0126		
							30.000		0373	.1680	0187		
							60.000		.0244	-1630	0028		
							90.000	.0830	-1143	.1425	2695		
							120,000		.1857	.2807	.2942		
							135,000		-2016	.2784	.4545		
							150,000		1993	3414	•3416		
							165.000		.1754	-3077	-1107		
							195.000		•	.2787	.1080		
							210.000			.3191	.1973		
							225.000			.2739	3656		
	- 1						240.000			.2552	.2220		
							270.000	.0855	4444				
							300.000	10000	-1114	.1447	.2472		
· · · · ·							300.000			.1669	.0254		

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TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-141419 OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUT10)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.930 BETA ( 1) = .000

X/L

.634 .742 .851

.986

PHI

330.000

.1684 -.0126



DATE OF MAY 75 TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

PAGE 947

4.000

1.250

## ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUT11) ( 22 OCT 74 )

#### REFERENCE DATA

LREF = 1290.3000 IN.

SREF \* 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

#### PARAMETRIC DATA

8.000

.000

1.000

ELV-IB =

RUDDER =

CALE = .0200	n IN. ZT					GIMBAL
SECTION ( 1) EXTERNAL TANK DE	PENDENT VAR	RIABLE CP				
LPHA (1) = -4.746 BETA (1) = .006	X/L FHI	. 634	.742	.851	.986	
	.000			.0399	.0622	
	30,000		1998	0081	.0440	
	60°CO		1253	0327	.0413	
	90.000	0611	1001	.03/39	.2619	
	120,000		0664	.0208	.2466	
	135,000		0632	0257	.3978	
	150,000		0770	.1738	.3273	
	165.000		2012	.1525	,1313	
	195.000			.0817	.0470	
	210,000			.1265	.1393	2.
	225.000			0560	.3449	
	240.000			0364	.1946	
	270,000	0667	0920	.0153	.2591	
	300.000			0343	.0712	
	330.000			0136	.0540	4.
PHA (2) =444 BEVA (1) = -4.000	X/L	.634	.742	.851	.986	
	FHI					-
	.000			.1865	.0975	
	30.000		0939	.1876	.0577	
	60.000		0204	-2148	.0982	
	90 .000	.0406	.0161	.1295	.3431	
	120.000		7090	.3460	. 4846	
	135.000		.0990	.3296	. 6388	
	. 150.000		.0991	.4408	. 5778	
• •	165.000		.0078	.4187	.3945	
	195,000			0148	0925	
	210.000			0035	0061	
	225.000			0686	.2795	
	240.000			1153	.1717	
	270.000	1331	2164	.0168	3786	
	300.000			.0910	.0821	
	330.000			.1841	.0904	
PHA (2) =402 BETA (2) = .012	.X/L	. 634	.742	.851	.986	
ering and the second of the se	FHI.					
	.000			.1789	.0739	
	171717		1903		.0686	
	מווא נוצי					
	30.000 60.000			1912		
	30 .000 60 .000 90 .000	0558	1274 1090	.1118	.(1852	

.0000 IN. YT

# ARC11-014TA19 OTS+STRUT SRB-LOW MFS-NON EXT TANK

DEPENDENT VARIABLE CP SECTION ( 1) EXTERNAL TANK . 634 .742 .851 X/L ALPHA ( 2) = -.402 BETA ( 2) = .012 PHI -.0522 .1258 .4940 135,000 .2565 .3831 -.0617 150.000 .2329 .1790 -.1868 165,000 .1099 .1654 195,000 .2112 .2045 210,000 .1173 .4190 225.000 .1193 .2792 240,000 .4551 .0392 -.0646 -.0982 270.000 .1076 .1043 300.000 .0803 .1884 330.000 .986 .851 X/L .742 ALPHA ( 2) = -.324 BETA ( 3) = 4.034 PHI .1018 .1781 .000 -.2648 .1752 .0794 30.000 .0928 .0618 -.2165 **60.000** .3511 90.000 -.1115 -.2431 .0057 -.2030 -.1195 120.000 .1864 -.1434 -.1395 135,000 .0269 -.1389 -.0465 150,000 -.1650 -.0850 -.1031 165,000 .3867 .3672 195,000 .3710 .3871 210.000 .3147 .5168 225.000 .4005 .2882 240.000 .1182 .3342 .0240 .0341 270.000 .1192 .2116 300.000 .1797 .0706 330.000 X/L .742 .851 ALPHA ( 3) = 3.552 BETA ( 1) = .003 PHI .0981 .2579 .000 .0595 .2264 30.000 -.1873 -.1132 .2070 .0999 60.000 .0963 .3500 -.0355 -.1156 901.000 .3558 -.0421 .2684 120,000 -.0204 .2695 .4769 135.000 .4137 -.0580 .3316 150,000 -.1443 .2987 .2057 165.000 .2506 .1621 195.000 .2833 .2676 210.000 . 41 52 .2511 225.000 .2336 .2938 240.000

270.000

300.000

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.3472

.1161

.0699

.2050

-.0605 -.1104

(REUT11)





DATE DI MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-D14 )

PAGE 949

ARC11-0141419 OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUT11)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.552 BETA ( 1) = .003

X/L . 634 .742 .851 PHI

330.000 .2229 .0713

.986

## ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUT12) ( 22 OCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

SREF =	2 <b>69</b> 0.0	000 <b>SQ.F</b> 1	T. XMRP	=	.0000	IN. XT IN. YT					ELV-IB = RUDDER =	8.000 .000	ELV-OB = MACH =	4.000 1.400
BREF = SCALE =		000 IN. 200	ZMRP	= 400	0000.0	IN. ZT					GIMBAL =	1.000		
		TERNAL TA	ANK		DEP	ENDENT VA	RIABLE CF	<b>.</b>						
ALPHA (	1) = +4	.122 BE	TA (1) =	.000		X/L PHI	. 634	.742	.851	.986				
						.000			0038	.0080				
						30.000		1449	0487	0021				_
						eo .000		0774	0759	.0291				0.0
						90,000	0263	0598	0139	.4824				ORIGINAL PAGE TO OF POOR QUALITY
						120.000		0511	.0067	.2910				મુલ
						135,000		0835	0857	• 4535			د	文艺
						150.000		1213	.1847	.4021			£,	
						165.000		1318	.1628	-2150			€ `	20 F
•						195,000			.0837	-1012			PAGE QUALIT	Q H
						210.000			.1124	.1839			A = A	PAGE
						225.000			0552	.3551				
						240.000			0121	2589			32.	الم الم
						270.000	0777	0715		. 4872		4	<b>₹</b>	7 =
						300.000			0704	.0457				, 4 0
						330.000			0488	0028				
ALPHA (	2) = -	.396 BE	TA (1) =	-4.003		X/L	. 634	.742	.851	.985				
						FHI								
						.000			0036	.0421				
				•		30.000		(1649	0231	.0139				
						60.000		.0067	.0300	.0462				
						90 .000	.0099	•0066	.0234	-3120				
						120.000		.1279	-3177	-5345				
						135,000		.1397	-2946	.5924				
						150.000		.1317	3973	6441				
						165.000		.1295	.3868	.4995				
		* 1				195.000			0144	0585				
						210.000			0031	.0125				
						225.000			1024	.2794				
	•					240.000			0944	.2206				
						270.000	0907	1 538	1016	-3501				
						300,000			1409	.1364				
						,330+000			0525	.0493				
								_						
ALPHA (	2) = -	.378 BET	(A ( (2) =	.006		X/L	. 634	.742	.851	.986				
						PH]								
						.000			.0010	.0249				
						30.000			0394	.0356				
						60 1000			0602	.0452				
						90.000	0243		0146	.3920				
						120,000		0191	.1227	.3965				

### ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUT12)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VA	RIABLE CP			
ALPHA (2) = +.378 BETA (2) = .006	X/L	. 634	.742	.851	.986
	FHI				
	135,000		0466	-,0368	.52€0
	1 50 - 000		0738	.2458	.4466
	165.000		1090	-2239	.2535
	195,000			-1419	.1606
	210,000			.1693	.2365
	225,000			.0614	.4019
	240.000			.0766	-3071
	270.000	0530	0737	0738	4056
	300.000			0634	.0615
	330,000			0367	.0294
ALPHA (2) =315 BETA (3) = 4.025	X/L FHI	. 634	.742	.851	.986
	.000			.0001	.0476
	30,000		2085	0569	.0393
	60.000		1501	1539	.0172
	90.000	0613	1593	0840	-2851
	120,000		1882	0475	.1931
	135,000		~.1966	1152	-2039
•	150.000		2090	.0260	1073
	165,000		2867	0140	0363
	195,000			.3344	.4548
	210,000			.3533	4009
	225.000			.2719	.4455
	240,000			.2426	.4194
	270.000	.0016	0050	0362	.2437
	300,000			.0257	.0611
	330 -000			0200	.0116
ALPHA ( 3) = 4.005 BETA ( 1) = .000	X/L	.634	.742	.851	.986
	PHI				
	.000			.0188	.1575
	30.000		1557	0192	.1273
	60.000		0845	0350	.0707
	90,000	.0028	0880	0748	.1672
	120.000		0088	.2187	. 41 64
	135.000		0038	.1252	. 5371
	1 50 - 000	•	0276	.3136	. 4649
	165.600		0806	.2846	.2692
	195,000			.2209	2071
	210.000			.2500	.2912
	225,000			.1926	.4180
	240.000			.1813	3402
	270.000	0164	1056		.1454
	300.000		_	0367	.0551

DATE DI HAY 75 TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-D14 )

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ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUT12)

SECTION ( 1) EXTERNAL TANK

DEFENDENT VARIABLE CP

ALPHA ( 3) = 4.005 BETA ( 1) = .000

.634 .742 .851 .986

PHI 330,000

X/L

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CATE B1 MAY 75

ARC11-014TA19 OTS+STRUT SRB-NON MPS-OFF EXT TANK

(REUT13) ( 22 OCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.	XMRP = 976.0000	IN. XT					ET'A-1B	=	8.000	EFA-GB =	4.000
LREF = 1290.3000 IN.	YMRP = .0000	IN. YT					RUCCER	=	.000	MACH =	.900
BREF = 1290.3000 IN.		IN. ZT					GIMBAL	=	1.000		
SCALE = .0200											
SECTION ( 1) EXTERNAL TANK	DET	ENDENT VAR	RIABLE CP								
			<u> </u>			000					
ALPHA ( 1) = -4.119 BETA	(1) =003	X/L	- 634	.742	.851	.986					
		FHI			04.40						
		.000		- 4400	0396	2927					
		30.000			0324						
		60,000	- 0425	0385		.1996					
	•	90.000	11463		0378	.0282					
•		120.000 135.000			0528	.2364					
				.0045	.0733	.1154					
		150,000		0235		1081					
	•	165,000 195,000		0233		1809					
						0412					
		210.000 225.000			0381	.2466					
		249.000				0348					
		270.000	1347E	0461	0187						
		300.000	~10413	0401		2132		•			
		330.000				3323					
		JOHN CEEL			•(IE33	13323					
ALPHA ( 2) =390 BETA	(1) = -3.997	X/L	. 634	.742	.851	.986					
		<del>TH</del> I									
		.000			0005	2679					
		30.000		0870	0042	39164					
		60 .CCC		0378	.0136	2299					
		90.000	.0200	.0269	0308	.1338					
· · · · · · · · · · · · · · · · · · ·		120.000		-1108	.1302	.1720					
		135.000		.1259	.1271	. 4914					
		150.000		.1517	.2820	.3664					
		165.000		.1078	.2319	.1147					
		195.000			0518	2344					
		210.000			0453	1036	i				
		225,000			0806	-1491					
•		240.000			1030	0511					
		270.000	1139	1151	+.0330	.1618					
		300 -000			0294	1982					
		330 .000			0163	3999					
ALPHA ( 2) =378 BETA	(2) = .016	X/L	. 634	.742	.851	.986					
ALTHA ( E) = -1310 DEIA		PHI	1007								
		.000			.0223	2521					
		30.000		1260		2799					
		60.000		0920		2267					
		90.000	e .0 62A	0343		.2146					
		30.000	- 10 320	2022	0.00	.6140					

120.000

.0230 .0424 .1023

3

# ARC11-014TA19 OTS+STRUT SRB-NOM MFS-OFF EXT TANK

(REUT13)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	IABLE CP			
ALFHA (2) =378 BETA (2) = .016	X/L	. 634	.742	.851	.986
marketing of the property of the control of the con	PHI				
	135,000		.0328	.0162	.3527
	150,000		.0375	.1403	.1662
	165.000		.0150	.0980	0791
	195.000				1415
	210.000			.1135	.0149
	225,000			.0199	.3539
	240.000			0135	.0656
	270.000	0559	0410	0086	.2128
	300.000	•		0048	1876
	330.000			.0026	2804
ALFHA (2) =327 BETA (3) = 4.028	X/L	.634	.742	.851	.986
	FHI				_ 0000
	.000				2890
	30.000			0417 0605	3193 2427
	60.000	44.			.2456
	90.000	11/3	1307		0577
	120.000			1083 1083	.0610
	135.000			0625	0188
	150.000			0873	1757
	165.000		2261	.1992	.1092
	195,000			.2532	.0918
	210.000			.1123	.3520
	225,000 240,000			.0769	.0648
	270.000	.0112	.0176	0319	.0940
	300,000	.0112	101 10	.0126	2163
				0165	3221
	330,000			~10103	• 456.1
ALPHA (3) = 3.909 BETA (1) = .000	X/L FHI	. 634	.742	.851	.986
	.000			.0059	2654
	30.000		1534	0185	3/363
	60,000		1200	0314	2327
	90.000	0570	0721	1041	.1162
	120.000		.0335	.0570	.1237
	135.000		.0486	.0322	.4195
	150.000		.0552	.1575	.1642
	165.000		.0327	.1106	0719
	195.000			.0765	1307
	210.000			.1469	.0192
	225.000			.0586	.3816
	240.000			.0238	.0596
	270.090	0594	0892	0995	
	300.000			0222	2042

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DATE OI MAY 75 TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-NOM MFS-OFF EXT TANK

(REUT13)

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CF

ALPHA ( 3) = 3.909 BETA ( 1) = .000

X/L .634 .742 .851 .986

PHI

-.0136 -.3015 330,000

4.000

ARC11-014TA19 OTS+STRUT SRB-NOM HES-OFF EXT TANK

(REUT14) ( 22 OCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

			wee -							m u m =	6 ppg	FI 1/ 05
	2690.0000		XMRP =		000 IN. XT					ELV-IB =	8.000	ELV-CE
	1290.3000		YMRP =		000 IN. YT					RUDDER =	.000	MACH
BREF =	1 <b>290.3</b> 000 0200		ZMRP =	400.0	909 IN. ZT					GIMBAL =	1.000	
SCACE -	• 6/26/6											
SECTION	( i) EXTER	INAL TANK			DEPENDENT V	RIABLE C	P					
ALPHA (	1) = -5.14	2 BETA	(1) =	006	X/L PHĪ	. 634	.742	.851	• <del>9</del> 86			
					.000			.2243	0031			
					30.000		.0355	.2145	.0054			
					60.000		.0610	.2144	.1298			
					90.000	1004	.0547	.1785	.4256			
•					120,000	1 1004	.0989	.1655	1935			
					135,000		.1111	.1673	.2983			
Ç					150.000		.11972	2376	.2671			
					165.000		.0589	2021	.0393			
		•			195.000		*******	.1669	.0250			
			-		210.000			.2099	.1304			
					225.000			.1638	30142			
					240.000			.1397	.0790			
					270.000	0952	.0306	.1652	.4079			
					300.000		V2.02.	-2162	.1842			
					330.000			2124	.0101			
ALPHA (	2) =32	1 BETA	(1) = -	4.003	X/L	. 634	.742	.851	.986			
					PHI							
					.000			.2012	.0178			
					30.000		.0330	-2043	0183			
					60.000		1016	-2244	-0155			
					90.000	.1086	.1899	.2214	2862			
					120.000		.2550	.3382	-3707			
•					135.000		.2669	.3286	.6325			
					150.000		.2895	.4577	-5266			
					165.000		.2434	.4209	.3183			
					195.000			.0329	0793			
					210.000			.0566	.0259			
					225.000			.0513	.2466			
					240.000			.0557	.0343			
					270.000	0797	.0219	.1466	-2444			
					300.000			.1642	.1419			
					330.000			.1874	.9136			
ALPHA (	ž) =43	2 BETA	(.2) =	.016	X/L	. 634	.742	851	.986			
					PH I							
					.000			.2099	101 58			
					30.000		0448	.2003	.0076			
					60 .000		.0056	.2038	.0476			

90.000 -.0111 .1075 .2363

.1541

.2241

120.000



DATE DI MAY 75

### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF EXT TANK

(REUT14)

FHI 135.000 .1621 .2326 199.000 .1590 .3052 165.000 .1217 .2669 .1 199.000 .2232 .2661 2210.000 .22661 2210.000 .2661 2210.000 .2661 2210.000 .2661 2210.000 .2174 .2277 .300.000 270.0000007 .0954 .2277 .300.000 270.000 .2095 .309.000 270.000 .2095 .309.000 270.000 .000 .2095 .300.000 270.000 .000 .2095 .300.000 270.000 .000 .2095 .300.000 270.000 .0014 .1459 .6 90.000 .0114 .1459 .6 90.000 .0114 .1459 .6 120.000 .0114 .1459 .6 120.000 .0146 .0016 .1459 .6 120.000 .0146 .0016 .2095 .1166 .1 120.000 .0146 .0016 .2095 .300.000 .217 .300.000 .217 .300.000 .217 .300.000 .2202 .200.000 .2007 .1630 .200.000 .2007 .1630 .200.000 .2007 .1630 .200.000 .2007 .1630 .200.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2007 .300.000 .2002 .2004 .200.000 .2002 .2004 .200.000 .2002 .2000 .200	SECTI	ON (1	) EXTERNA	L TANK				DEPENDENT VARIABLE CP						
190.000	ALFHA	( 5) =	432	BETA	( 5)	Ξ	.016		. 634	.742	.851	.986		
165.000								135,000		.1621	.2326	.3969		
165.000											3052	.3278		
195.000												.0986		
210.000												.0621		
225.000												.1744		
240.000												3964		
270.0000007 .0954 .2277 300.000												.1576		
300.000 .2015 .3 330.000 .2015 .3  ALPHA (2) =396 BETA (3) = 4.025									0007	.0954		-2846		
ALPHA (2) =396 BETA (3) = 4.025  X/L						٠.						.1132		
FHI												.0136		
30.000	ALPHA	( 2) =	396	BETA	( 3)	=	4.025		.634	.742	.851	.986		
60.0000775 .0003 .1166 .1 90.0000775 .0003 .1166 .1 120.0000146 .0078 .1 135.00004920101 .1 155.00010020307 .1 165.000113404211 195.000 .3818 .3 210.000 .4207 .3 225.000 .3158 .3 240.000 .2915 .2 270.000 .1094 .1824 .2089 .2 270.000 .1094 .1824 .2089 .2 300.000 .2222 .6 330.000 .20046  ALPHA (3) = 3.864 BETA (1) = .003								.000			.1936	.0197		
90.0000775 .0003 .1166 .3 120.0000146 .0078 .3 135.00004920101 .1 150.00010020307 .3 165.00011340421 195.00011340421 195.000 .3818 .3 210.000 .4207 .3 225.000 .2915 .2 270.000 .1094 .1824 .2089 .3 300.000 .2222 .6 330.000 .2222 .6 330.000 .2222 .6 330.000 .2222 .6 300.000 .000 .1775 .0 4LPMA (3) = 3.864 BETA (1) = .003								30.000		.0217	.1830	.0085		
120.0000146 .0078 .6 135.00004920101 .6 150.00010020307 .6 165.000113404216 195.00011340421 195.0004207 195.0004207 225.0003158 240.0002915 270.0000002222 330.0002222 330.0002222 330.0002222 300.0002222 300.00003921661 1775 30.00003921661 60.00002271632 90.00003921661 120.00008381481914 120.00008381481914 120.00008381481914 120.00018592786 150.00017793067 195.00017793067 195.0002749 195.0002749 210.0002749 210.0002749 210.0002714 225.0002714 225.0002714 225.0002714 225.0002714 225.0002714 240.0002733 240.0002733 240.0002714 25533 25533 270.000087711001477								00.000		.0114	.1459	.0996		
135.00004920101 150.00010020307 165.00011340421 195.000 195.000 210.000 210.000 225.000 231.58 240.000 2915 270.000 .1094 .1824 .2089 300.000 2004  ALPHA (3) = 3.864 BETA (1) = .003 X/L .634 .742 .851 FHI								90.000	0775	.0003	.1166	.2591		
150.00010020307 .0 165.000113404210 195.000 .3818 .0 210.000 .4207 .0 225.000 .3158 .0 240.000 .2915 .0 270.000 .1094 .1824 .2089 .0 300.000 .2222 .0 330.000 .20040  ALPHA (3) = 3.864 BETA (1) = .003								120,000		0146	.0078	.0178		
165.00011340421 195.000 .3818 .3 210.000 .4207 .3 225.000 .3158 .3 240.000 .2915 .3 270.000 .1094 .1824 .2089 .2 300.000 .2222 .6 300.000 .2222 .6 300.000 .2222 .6 300.000 .2222 .6 300.000 .2222 .6 4LPHA (3) = 3.864 BETA (1) = .003								135,000		0492	0101	.2129		
195.000								150,000		1002	0307	.0271		
210.000								165.000		1134	0421	1021		
225.000 .3158 .3240.000 .2915 .2300.000 .2915 .2300.000 .2004 .2009 .2300.000 .2004 .2009 .2222 .6300.000 .2004 .000 .2004 .000 .2004 .000 .2004 .000 .2004 .000 .2004 .000 .2004 .000 .2004 .00000 .00000 .000000								195,000			.3818	.3104		
240.000								210.000			.4207	-3165		
270.000 .1094 .1824 .2089 .2 300.000 .2222 .6 330.000 .20040 330.000 .20040  ALPHA (3) = 3.864 BETA (1) = .003								225.000			.31.58	5786		
300.000 .2222 .0 330.000 .20040 330.000 .20040  ALPHA (3) = 3.864 BETA (1) = .003								240.000			-2915	-2931		
330.000 .20040  ALFMA (3) = 3.864 BETA (1) = .003								270 .000	1094	.1824	-2089	.2768		
ALPHA (3) = 3.864 BETA (1) = .003								390,000			.5555	.0488		
FHI								330.000			.2004	0160		
.000 .1775 .0 30.0000392 .16810 60.000 .0227 .16320 90.000 .0838 .1148 .1504 .2 120.000 .1859 .2786 .2 135.000 .2015 .2778 .4 150.000 .1992 .3401 .3 165.000 .1779 .3067 .1 195.000 .2749 .1 210.000 .3164 .1 225.000 .2714 .3 240.000 .2533 .2	ALPHA	( 3) =	3.864	BETA	(1)	=	.003		.634	.742	.851	.986		
30,000      0392       .1681      0         60,000       .0227       .1632      0         90,000       .0838       .1148       .1504       .2         120,000       .1859       .2786       .2         135,000       .2015       .2778       .4         150,000       .1992       .3401       .3         165,000       .1779       .3067       .1         195,000       .2749       .1         210,000       .3164       .1         225,000       .2714       .3         240,000       .2533       .2         270,000       .0877       .1100       .1477       .2	•													
60,000       .0227       .1632      0         90,000       .0838       .1148       .1504       .2         120,000       .1859       .2786       .2         135,000       .2015       .2778       .4         150,000       .1992       .3401       .3         165,000       .1779       .3067       .1         195,000       .2749       .1         210,000       .3164       .1         225,000       .2714       .3         240,000       .2533       .2         270,000       .0877       .1100       .1477       .2												.0129		
90.000 .0838 .1148 .1504 .2 120.000 .1859 .2786 .2 135.000 .2015 .2778 .4 150.000 .1992 .3401 .3 165.000 .1779 .3067 .1 195.000 .2749 .1 210.000 .3164 .1 225.000 .2714 .3 240.000 .2533 .2												0189		
120,000												-,0053		
135,000 .2015 .2778 .4 150,000 .1992 .3401 .3 165,000 .1779 .3067 .1 195,000 .2749 .1 210,000 .3164 .1 225,000 .2714 .3 240,000 .2533 .2 270,000 .0877 .1100 .1477 .2			*						.0838			.5695		
150,000 .1992 .3401 .3 165,000 .1779 .3067 .1 195,000 .2749 .1 210,000 .3164 .1 225,000 .2714 .3 240,000 .2533 .2 270,000 .0677 .1100 .1477 .2												2934		
165.000 .1779 .3067 .1 195.000 .2749 .1 210.000 .3164 .1 225.000 .2714 .3 240.000 .2533 .2 270.000 .0677 .1100 .1477 .2												.4518		
195.000 .2749 .1 210.000 .3164 .1 225.000 .2714 .3 240.000 .2533 .2 270.000 .0877 .1100 .1477 .2												.3346		
210.000 .3164 .1 225.000 .2714 .3 240.000 .2533 .2 270.000 .0877 .1100 .1477 .2										.1779		-1101		
225,000 .2714 .3 240,000 .2533 .2 270,000 .0077 .1100 .1477 .2												.1957		
240,000 .007 .1100 .1477 .2												1933		
270.000 .0877 .1100 .1477 .2	•											.3656		
												-2190		
399.000 .1652 .0									.0877	1100		.2521		
								300.000			1652	.0271		

DATE DI HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-D14 )

FAUE 958

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF EXT TANK

(REUT14)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.864 BETA ( 1) = .003

X/L

.634 .742

.851 .98

330.000

.1674 -.0118



DATE OF MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 959

# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF EXT TANK

(REUT15) ( 22 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200	SREF = LREF = BREF =		XMRP = YMRP =	976.0000 IN. XT .0000 IN. YT	ELV-IB = RUCDER = GIMBAL =	.000		
--	----------------------------	--	---------------	---------------------------------	----------------------------------	------	--	--

SECTION ( 1) EXTERNAL	TANK		DEPENDENT VAR	TABLE CP				•
ALPHA ( 1) = -4.113	BETA	(1) = .003	X/L PHI	. 634	.742	.851	.986	
			.000			.0200	.0754	
			30.000		1910	0214	.0643	
			60.000		1194	0362	.0336	
			90.000	0597	0957	.0268	.2701	7575
			120,000		0632	.0364	.2699	무유
			135,000	•	11668	0184	.4203	
			150.000		0612	.1896	.3511	IGINAL POOR
			165,000		1962	.1686	.1532	82
			195,000			.0861	.0569	ਲ ⊵
			210.000			.1339	1469	
			225,000			0460	.3556	
			240.000			0217	.2124	, PAGE
			270,000	0660	0893	.0136	27.19	L 1 227
			300,000			0432	.0665	ALLI ST, T
			330.000			0290	.0702	₹ 55°
ALPHA ( 2) =390	BETA	(1) = -4.000	X/L	. 634	.742	.851	.986	
			PHI			.1798	.1006	
			.000		2005		.0717	
			30.000		0965	.1953		
			60.000		0237	.2100	.1002	
			90.000	.0368	.0039	.1097	. 4881	
			120.000		.0859	.3432	.6368	
			135,000		.0963	3264	.5875	
			150.000		.0960	.4424		
			165.000		.0123	.4182 0136	.4015 0879	
			195,000			.0050	0038	
			210.000			0698	.2795	
			225.000			1237	.1748	
•			240.000			0087	.3881	
			270.000	1311	2121		.0837	
			300.000			.0680 .1650	.0943	
		-	330 .000			•1 60ti	.0943	
ALPHA ( 2) =363	BETA	(2) = .012	X/L FHI	. 634	.742	.851	.986	
		4	.000			.1680	.0873	
			30.000		1848	.1761	.0881	
			60.000		1201	.0998	.0907	
			90.000	0555	1056	.0469	.4279	
			120,000		0671	.1680	.3319	
			120,000		10011			

(REUT15)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARIABLE	CP		
ALFHA ( 2) =363 BETA ( 2) = .012	X/L 634 PHI	.742	.851	.986
	135.000	0501	.1344	.4950
	150.000	0493	.2681	.3933
	165.000	1763	.2399	.1954
	195.000		.1637	.1098
	210.000		2003	.2173
	225.000		.1214	. 42:11
	240.000		.1105	.2764
		521029	.0229	4573
	300.000	,	.0834	.1162
	330.000		.1532	.0911
	220.000		7.304	
	X/L .63	.742	.851	.986
ALFHA ( 2) =294 BETA ( 3) = 4.028	PHI .	1 1.74		
	•090		.1756	.1038
	30,000	2563	.1568	.0858
	60.000	-,2079	.0739	.0628
	90.00010		0143	3550
	120.000	2094	1116	.1629
	135.000	1525	1402	.1957
	150.000	1459	0299	.5404
	165.000	1669	0692	0877
	195.000		·3 <i>5</i> 08	.3834
	210,000		.3771	.3654
	225.000		<b>.3</b> 9 <i>5</i> 9	57753
	240.000		.2791	.3961
	270.000 .03	00 .0207	.0942	.3299
	300.000		.2061	.1198
	330.000		.1910	.0730
ALFHA (3) = 3.834 BETA (1) = .012	X/L .63	4 .742	.851	.986
	FHI			
	.000		.2491	.1033
	30 (000	1788		.0713
	0.000	1080		1015
	90.0000	27 - 1144		.3298
	120.099	0372		.3644
	135,000	0160		.4815
	1 50 .000	0544		4190
	\$ 65,000	1371		-2162
	195.000		.2476	.1619
	210.000		.2822	.2600
	225.000		-2532	.4128
	240.000		.0309	.2981
•	270,0000	5751158		-3345
	300,000		.50.69	.1175

1

DATE OI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 961

ARC11-0141A19 OTS+STRUT SRB-NOM MFS-QFF EXT TANK

(REUT15)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.834 BETA ( 1) = .012

X/L .634

.742 .851 .986

HI

330.000 .2243 .0725

#### ARC11-014TA19 OTS+STRUT SRB-NON MPS-OFF EXT TANK

(REUT16) ( 22 OCT 74 )

	FD		D.	

	REFERENCE DA	ITA .						i	PARAMETRIC	DATA	
SREF = LREF = BREF = SCALE =	2690.0000 SQ.FT. 1290.3000 IN. 1290.3000 IN.	YMRP = .0	0000 IN. XT 0000 IN. YT 1000 IN. ZT					ELV-IB = RUCCER = GIMBAL =	8,000 000 1,000	ELV-CB = MACH =	4.000 1.400
e E C T I C	N ( 1) EXTERNAL TANK		DEPENDENT VAR							•	
SECTION	Y CIJEXIERNAL IANA		DEFENDENT VAN	IABLE CP							
ALPHA (	1) = -4.095 BETA	(1) = .012	X/L FHI	. 634	.742	.851	.986				
			.000			0048	.0085				
			30.000		1462		0031				
			60.000		0784	0726	.0304				
			90.000	0265	0603	0164	.4751				
			120,000		0529	.0039	-2906				
		•	135.000		0831	0921	.4445				
			1.50 -000		1240	.1820	.3924				
	- 10 m → 10 m =		165,000		1311	.1581	.2172			ORIGINAL OF POOR	
			195.000			.0803	.0987				
			210.000			.1099	.1815			[GINAI POOR	
			225.000			0534	.3576			8z	
•			240.000			0166	.2578			` `` ≥	
			2701-000	0805	0716	0523	4855				
			300.000			0681	.0451			217	
			330.000			0493	0030	•	•	PAGE	
ALPHA (	2) =393 BETA	(1) = -4.000	X/L PHI	. 634	.742	.851	.986			PAGE IS	
			.000			0006	.0415			. 02	

ALPHA ( 2) = -.291 BETA ( 2) = -.003

X/L	. 634	.742	.851	.986
PHI				
.000			0006	.0415
30.000		0651	0221	.0144
60 .000		.0054	.0301	.0472
90.000	.0088	.0059	.0248	.3096
120.000		.1281	-3143	• 5330
135.000		.1332	.2980	. 5911
1 50 .000	*	1326	3965	. 6420
165.000		.1270	.3883	.4985
195.000			0125	0610
210.000			0030	.0084
225,000			0947	.2764
240.000			0943	21 (0)
270 .000	0913	- 1532	1025	.3452
300+000			1429	.0380
330.000			0548	.0420
X/L	. 634	.742	.851	.986
PHI				
.000			0016	.0229
30.000		1480	0411	.0318
60.000		-,0806	0600	.01462
90.000	0252	0647	0182	.3893
120.000		0294	.1230	.3946

# ARC11-0141419 OTS+STRUT SRB-NON MPS-OFF EXT TANK

SECTION (1) EXTERNA	-74NK			DEPENDENT VARIABLE CP						
ALPHA ( 2) =291	BETA	(2) =	003	X/L	. 634	. 742	.851	.986		
				FHI						
				135,000		0480	0445	5223		
				150.000		0763	.2421	4357		
				165,000		1092	.2295	.2477		
				195,000			1395	.1549		
				219.000			.1655	-2344		
				225.000			0542	.3982		
				240.000			.0745	.30.60		
	:			270.000	0551	0759		. 4050		
				300.000			0651	.0605		
				3301000			0371	.0274		
ALFHA ( 2) =318	BETA	(3) =	4.025	X/L FHI	. 634	.742	.851	986		
				.000			0009	.0447		
				30,000		2076	0570	.0383		
				60,000		1481	1528	.0156		
		*		90,000	0611	1566	0856	.2881		
				120,000		1889	0493	1891		
				135,000		1937	1127	.1998		
				150,000		2073	.0249	1021		
				165,000		2861	0181	0335		
				195,000			-3335	.4557		
				210.000			.3545	.4019		
	•			225,000			.2707	.4474		
				240.000			.2448	. 41 53		
				270 .000	.0003	0053		.2408		
				300+000			.0255	.0602		
				330 .000			0180	.0121		
ALFHA ( 3) = 3.861	BETA	(1) =	006	X/L PHI	. 634	.742	.851	.986		
				.000			.0215	.1637		
				30,000		1508	0182	.1355		
			•	60.000		0815	0310	.0605		
				90.000	.0062	0843	0706	.1728		
•				120,000		0035	-2195	.4179		
				135,000		0030	.1196	. 5370		
				150 -000		0193	.3136	.4650		
				165.000		0788	.2847	.2721		
				195.000			.2203	.2031		
				210.000			.2533	.2922		
				225,000			.1965	.4237		
				240.000			.1859	.3464		
				270.000	0159	1007	1207	.1521		
				300.000			0291	.0637		

(REUT16)

CATE O1 HAY 75

TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

PAGE 964

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF EXT TANK

(REUT16)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.861 BETA ( 1) = -.006

X/L

.634 .742 .851 .986

PHI

330.000

-.0175 .1350

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DATE OI MAY 75
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#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 965

4.000

.900

ARC11-014TA19	OTS+STRUT	SRR-HT	MPS-HT	FXT	MARK

(REUT17) ( 22 OCT 74 )

MACH =

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT

#### PARAMETRIC DATA

.000

1.000

ETA-18 =

8.000 ELV-08 =

SRE#	=		00000.00		XMRF	=		0000						RUCDER =
LREF			90.3000		YMRP			.0000						
BREF		15	90.3000	1N.	ZMRP	Ξ	400	.0000	IN. 21					GIMBAL =
SCALE	. =		.0200											
SECT	TON	. (	1)EXTERI	NAL TANK				DEPE	NDENT VA	ARTABLE CF	•			
ALPHA		1)	= -4.15	5 BETA	(1):	=	eon.		X/L	. 634	.742	.851	.986	
									PHI					
									.000			•	2517	
									30.000		1044	.0048	2663	
•									60.000		0726	.0026	1834	
									90.000	0387	0204	.0230	.1970	
									120.000			0156	.0233	
									135.000			0304	.2789	
•									50.000		.0245	.1014	.1304	
									165.000		0020	.0641		
									195.000			.0162	1473	
									210.000				0087 2774	
									225.000			0085	.0038	
	٠.								240.000 270.000	_ 0816	0237	0459 0133	.1815	
									000,000	-,0306	- 11,531		1737	
			•						330 .000			.0030	2858	
								•	3301.000				-12030	
ALFH/	٠.	2)	=42	6 BETA	(1)	: -4	.003		X/L	. 634	.742	.851	.986	
									FHI					
									.000			0014	2604	
									30.000		0918	0040	2726	
									en .000		0446		1921	
									90.000	.0189		0172	-1157	
	:							1	20.000		-1045	.1262	.1@4	
									35.000		.1146	.0952	. 9046	
									50.000		.1421	.2801	.3743	
									65.000		.0963	.2336	-1117	
									95.000			0621	~.2353	
								2	10.000			0518	1011	
	•								25.000			0860	.1496	
									40.000				0476	
								2	70.000	1123	1081	0343	.1628	
								. 3	000.000			0331	1912	
								3	30.000			0210	2883	
ALPHA	( .;	2) :	=447	7 BETA	(2) =	:	.009		X/L	. 634	.742	.851	.986	
									PH I	•				
				•					.000			.0269	2471	
						÷			30.000		1274	.0075	2534	
				*					eo.ooo		0928		1926	
									90.000	0550		.0002	-21 51	

120,000

ARC11-D141A19 OTS+STRUT SRB-HI MPS-HI EXT TANK

(REUT17)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARIABLE CP						
ALPHA ( 2) =447 BETA ( 2) = .009	X/L .634 .742 .851 FHI	.986					
	135,000 .02830049	.3845					
	190.000 .0291 .1365	.1507					
	165.000 .0089 .0954	0885					
		1313					
	210.000 000.0189	.0263					
	225.000 .0214	.3548					
	240.0000087	.0674					
	270.000057003780041	.2120					
	300,000 .0056	1796					
		2702					
ALPHA (2) =435 BETA (3) = 4.028	X/L .634 .742 .851 PHI	.986					
		2402					
	30,0001393 .0002	2448					
	60.00013160261	1719					
	90.000108411200229	-2171					
	120.00009380756	0572					
	135.00011470833	.1144					
	150.00015080259	0177					
	165.00021540549	2065					
	195.000 .2063	.1464					
	210.000 .2648	.1354					
	225.000 .1299	3904					
	240.000 .0981	.1137					
	270.000 .0140 .0404 .0016	.1441					
	300.000 .0321	1629					
	330.000 .0093	2654					
ALPHA (3) = 3.930 BETA (1) = .000	X/L .634 .742 .851 CHI	.986					
	0101	2574					
	39.00015530309	2748					
		- 1950					
	90.000056007711193	.1097					
<ul> <li>* * The state of t</li></ul>	120.000 .0264 .0478	.1190					
	135,000 .0430 .0085	.4495					
	150.000 .0468 .1540	1690					
		0724					
		1341					
	210.000 -1431	-0172					
	225.000 .0561	.3817					
	240,000 .0180	.0601					
	270.000059208951112	.0735					
	300.0000287	2035					



DATE O1 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 967

ARC11-D141A19 OTS+STRUT SRB-HI MPS-HI EXT TANK

(REUT17)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.930 BETA ( 1) = .000

.634 .742 .851

X/L PHI

330.000 -.0225 -.2937

# ARC11-014TA19 OTS+STRUT SRB-HI MPS-HI EXT TANK

(REUT18) ( 22 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

4,000 8.000 ETA-CB = · ELV-1B = XMRP = 976.0000 IN. XT SREF = 2690.0000 SQ.FT. 1.100 MACH = RUDCER = .000 .0000 IN. YT LREF = 1290.3000 IN. YMRP = GIMBAL = 1.000 ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

SCALE = .0200

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	TABLE CP	÷	•		
ALPHA (1) = -4.098 BETA (1) = .000	X/L	. 634	.742	.851	.986	
	FHI			.2276	.0047	
	.000		.0429	.2182	.0143	
	30.000			.2186	.1199	
	60,000		.0657	.2110	.4060	
	90,.000	0933	.0728	.1811	.1189	
	120.000		.1047		.3235	
	135,000		.1146	.1838 .2537	.2831	
	150.000		.1006		.0591	
	165.000		.0638	.2160 .1778	.0349	
	195,000				.1372	
	210.000			.2192 .1780	.3181	
	225.000				.0918	
	240,000			.1531	.3754	
	270,000	0883	.0600	.2009	.1687	
	300,000			.2199	.0198	
	330,000			.2167	11190	
DETA (4) = 4 007	X/L	. 634	,742	.851	.986	
ALPHA ( 2) =396 BETA ( 1) = -4.003	PHI					
	.000			.2032	.0194	
	30.000		.0332	5060	0172	
	60.000		.1023	.2257	.0188	
	90.000	.1065	.1913	.2232	2901	
	120.000	. 1003	.2564	.3367	.3656	
	135.000		.2681	.3306	.6329	
	150.000		.2917	.4578	.5275	
			.2444	.4214	.3184	
	165,000 195,000			.0412	0713	
				.0653	.0324	
	210.000			.0616	.2478	
	225.000			.0579	.0356	
	240.000	1207	.0226	.1511	.2454	
	270.000	0783	.0220	.1665	.1425	
•	300.000			.1910	.0146	
	330.000			.1510	10140	
ALPHA (2) =438 BETA (2) = .(X)9	X/L PHI	. 634	.742	.851	.986	
	.000			.2110	.0166	
	30.000		0433	.2012	.0093	
	60.000		.0052	.2025	.0489	
	000.00	0149	.1011	.2361	.2763	
	120.000		.1485	-2221	.2145	

ORIGINAL PAGE IS OF POOR QUALITY

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### ARC11-8141A19 OTS+STRUT SRB-HI HFS-HI EXT TANK

.1659

(REUT18)

SECTION ( 1) EXTERNAL TANK							DEPENDENT VARIABLE CP							
ALPHA ( 2)	=	438	BETA	( 2)	=	.009	X/L	. 634	.742	.851	.986			
		• :					· PHI							
							135.000		.1553	.2278	.3985			
							1 50 .000		-1447	.2972	.3221			
							1.65.000		-1111	.2608	.0964			
							195.000			.2293	.0718			
							210.000			.2679	.1800			
							225.000			.2230	. 4013			
							240.000			.2033	.1640			
							270.000	0043	.0914	.2294	.2791			
							300,000			-2125	-1083			
							330 .000			.2038	.0163			
ALPHA ( 2)	=	573	BETA	( 3)	=	4.028	X/L	. 634	.742	.851	.986			
							PHI							
							.009			.1961	.0203			
							30.000		.0279	1844	.0093			
							eo.ooo		.0256	.1470	.1913			
							90.000	0797	.0039	.1123	.2679			
. •							120,000		0126	.0064	.0179			
							135,000		0509	0148	.2128			
							150,000		0991	0282	.0286			
		•					165.000		1093	0426	0905			
							195.000			-3837	-3109			
							210.000			.4230	.3164			
							225,000			.3186	. 5071			
							240,000	,		.2942	-2915			
							270,000	.1099	.1834	.2162	.2791			
							300.000			.2261	.0505			
							330 .000			2030	0148			
			<u></u>						* .					
ALPHA ( 3)	=	3.915	BETA	(1)	=	.000	X/L	.634	.742	.851	•986			
							FHI							
							.000			.1770	.0134			
		•		,			30.000		0376	.1684	0176			
							60.000		-0243	.1637	0025			
							90.000	.0819	.1151	-1.409	.2678			
							120,000		.1862	.2817	.2957			
							135,000		.1991	.2789	. 451 5			
							1 50 - 000		1984	.3440	.3371			
							165.000		.1772	3:173	-1158			
		•.					195.000	•		2753	-1116			
							210.650	•		.3155	.1945			
-							225,000			.2733	. 361 4			
							240.000	_		.2549	.2185			
							270.000	.0854	.1096	.1442	.2524			

DATE 01 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 970

ARC11-0141A19 OTS+STRUT SRB-HI MFS-HI EXT TANK

(REUT18)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALFHA (3) = 3.915 BETA (1) = .000 X/L .634 .742 .851 .986

THI

.1671 -.0128 330.000

CATE DI MAY 75

PAGE 971

# ARC11-D14TA19 OTS+STRUT SRB-HI MFS-HI EXT TANK

(REUT19) ( 22 OCT 74 )

### REFERENCE DATA

ALPHA (2) = -.438 BETA (2) = .012

### PARAMETRIC DATA

Kerekei	ACE DAIL								
SREF = 2690.0000 SC LREF = 1290.3000 II BREF = 1290.3000 II SCALE = .0200	N. YMRP =	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT				ELV-IB = RUCCER = GIMBAL =	8.000 .000 1.000	ELV-OB = MACH =	4.000 1.250
SECTION ( 1) EXTERNAL	L TANK	DEPENDENT VAL	RIABLE CP						
ALPHA ( 1) = -4.185	BETA (1) =0	09 X/L PHI	. 634	.742	.851	.986			•
		.000			.0132	.0699			
		30.000		1917	0277	.0611			
		60.000		1187	0390	.0369			
		90.000	0594	0948	.0302	2712			
		120.000		0665	0342	.2716			
		135.000		0670	0189	·4200			
		150.000		0605	.1896	.3 <del>0</del> 17			`
•		165.000		~.1954	.1679	.1589		• •	육유
		195,000			.0822	.0473			ORIGINAL OF POOR
		210,000			.1295	.1411			IGINAI POOR
	•	225.000			0513	.3496			22
•		240.000			0310	.2090			$\bowtie$
		270.000	0698	0953	.0097	.2615			. E
		300,000			0412	.0635			೭೪
		330.000			0318	-0675			A JA
ALPHA ( 2) =459	BETA (1) = -4.0	000 X/L PHI	.634	.742	.851	.986			L PAGE IS QUALITY
	•	.000			.1733	.0971			1 02
		<b>3</b> 0.000		0970	.1988	.0715			
		60,000		0257	-2017	.2000			
		90,000	-0343	.0044	.0967	.3352			
•		120,000		0891	.3340	.4847			
		135.000		.0938	.3167	. 6313			
· .		150.000		.0961	.4326	- 58 59			
		165.000		.0136	.4098	4005			
		195.000			0125	0840			
		210.000			.0073	0042			
•		225,000			0769	.2749	•		

270.000 -.1285 -.2118 -.0080

.742

-.1842

-.1195

-.0683

-.0545 -.1046

.3825

.0800

.0919

.986

.08**52** 

. 41 79

.0691

.1578

.851

.1636

.1655

.0480

240.000

300.000

330.000

.000

30,000

60.000

90.000

120.000

X/L . . 634

.2323

.2174

.0556

.1988

-.0620 -.1210

.4067

.2839

.3476

.1150

(REUT19)

					AKI	.11-UIAIAIS OIG	+3,10, O			
SECTION ( 1)	EXTERNA	L TANK				DEPENDENT VAR	IABLE CF			
ALPHA ( 2) =	438	BETA	( 5)	=	.012	X/L FHI	. 634	.742	.851	.986
						135.000		0534	.1252	.5022
						150.000		0491	.5650	.3938
						165.000		1799	.2349	.1973
						195,000			.1570	.1076
						210,000			.1947	.2144
						225.000		•	.1080	.4197
						240.000			.1038	.2734
						270.000	0647	1030	.0166	.4535
						300,000			.0830	.1129
						330.000			.1435	.0886
ALPHA ( 2) =	549	BETA	( 3)	=	4.028	X/L PHI	. 634	.742	.851	.986
						.000			.1794	.1938
					•	30,000		2604	.1471	.0878
						60.000		2113	.0607	.0641
						90.000	1082	2386	0185	.3480
						120,000		2159	1139	.1625
						135.000		1483	1409	.1893
						150.000		1422	0336	.0433
•						165.000		1627	0702	0823
						195,000			.3529	.3863
						210.000			.3821	.3628
						225.000			-3053	.4996
						240 (000			.2837	3959
						270.000	.0312	.0132	.1094	.3344
						300.000			.2113	.1213
						330+000			.1951	.0757
ALPHA ( 3) =	3.516	BETA	- (-1)	=	.012	X/L PHI	.634	.742	.851	.986
						4000			.2459	.0972
						30,000		1806	.2243	.0675
						60.000		1094	.2005	.1027
•						90.000	0345	1141	.0691	.3350
						120.000		0364	.2709	.3619
						135.000		0175	.2714	.4786
•	100					150.000		0589	.3380	.4272
						165.000		1 608	.3038	.2252
						195,000			.2353	.1395
						210,000			.2717	.2377
						000 000			2727	40.67

225.000

240.000

270.000

300.000

ORIGINAL PAGE IS OF POOR QUALITY

DATE 01 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014IA19 OTS+STRUT SRB-HI MFS-HI EXT TANK (REUT19)

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

ALPHA (3) = 3.516 BETA (1) = .012 X/L .634 .742 .851 .986

PHI

.2217 .0691 330 .000

# ARC11-014TA19 OTS+STRUT SRB-HT MPS-HT EXT TANK

(REUT20) ( 22 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

SREF : LREF : BREF : SCALE :	= 1	0000, 0699 0002, 0691 0002, 0691	IN.	т.	XMRP YMRP ZMRP	= = = = = = = = = = = = = = = = = = = =	. (	0000	IN. XT IN. YT IN. ZT					ELV-18 = RUDDER = GIMBAL =	8.000 .000 1.000	ET N-OB	=	4.000 1.400
				71100.				UEBI	NOENT VAR	TABLE CP								
SECTI	ON	( 1) EXTER	CINAL	IAN				00,										
ALPHA	( 1	) = -4.16	67 B	ETA	(1) =		003		X/L FHI	. 634	.742	.851	.986					
									.000			0052	.0064					
									30.000		1452	0490	.0064					
									60.000		0781	0753	.0449					
									90.000	0275	~.0803	0204	.4653					
				•					120,000		0508	0112	.3222					
									135.000		0812	1999	. 4816					•
					•				150.000		1295	.1779	.3917					
									165.000		1268	1561	2055		•			
		*							195.000			.0825	.0937					
									210.000			.1087	.1759		Ris .			
									225.000			0548	.3522		**			
									240.000	•		0188	.2539					
									270,000	0779	0719		.4883					
									300,000			0667	.0465			į.		
	•								330.000			0493	0034	•	4			
.•									V //	67.4	.742	.851	-986					
ALPHA	( 2	2) =4	89 E	ETA	(1)	= -4	.(11.)3		X/L	. 634		.031	• 50.0					
									PHI .000			0025	.0395	· i				
											0659	0224	.0229					
							-		30.000		.0039	.0286	.0775					
									60.000	.0130	.0054	.0132	3127					
								•	90.000	.0130	.1264	.2874	.5325					
		. •							120,000		.1327	.2355	.5755					
									135,000		.1335	.3837	.6459					
									150.000		.1333	.3786	.4961					
									165.000		*1501	0087	0553					
									195,000			0010	.0132					
									210.000			0868	.272					
									225.000			0939	-214					
4									240,000	- 11003	1532	1007	.3443					
									200.000	0903	1336	1371	.037					
									300.000			0531	.0439					•
									330.000			0331	*51435	•				
ALPHA		o) 4	132	RETA	( 2)	=	.009		X/L	. 634	.742	.851	.986					
ALITTIA	1.	.,	I			-			PHI									
									.000			.0053	.027	6.				
									30.000		1398	0373	.048	3.				
									80.000			+.0600	.074	3				
									0.0 43.00			- 0218	305	5				

90.000 -.0172 -.0581 -.0218

120,000

-.0141 .0824 .4059





TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

# ARC11-014IA19 OTS+STRUT SRB-HI MPS-HI EXT TANK

(REUTEO)

SECTION ( 1) EXTERNAL TANK			DEPENDENT VAR	IABLE CP				
ALPHA ( 2) =432 BETA	( 2) =	.009	X/L PHT	. 634	.742	-8 51	.986	
			135,000		0410	1552	. 561 7	
			1 50 . 000		0712	.2384	.4480	
			165,000		0987	.2197	-2535	
			195.000			.1435	.1551	
			210.000			.1696	.2388	
			225.000			.0573	.3976	
			240,000			.0780	.3/19/1	
			270.000	0478	0693	0680	.4114	
•			300 .009			0590	.0732	
			330.000			0319	.0370	
ALFHA ( 2) =486 BETA	(3) =	4.025	X/L	.634	.742	.851	.986	
			PHI					
•			.000			0018	.0437	
			30,000			0613.		
			eo . ooo			1529	.0286	
			90,000	0602	1569		.2692	
			120,000		1874	0555	.2210	
			135,000		1891	1557	.2353	
• •			150,000		5065	.0269	-1037	
			165.000		2866	0152	0233	
			195,000			.3324	4515	
			210.000			.3504	.3985	
			225.000			.2682	.4438	
			240 -000			.2433	.4125	
			270.000	0008	()(142	0358	.2465	
			300.000			.0233	.0630	
•			330 -000			0196	.0117	
ALPHA ( 3) = 3.657 BETA	(1)=	.009	×/L	. 634	.742	.851	.986	
			FHI		,		4 505	
			.000			.0179	.1565	
•			30.000		1490		.1346	
	•		60.000		0818	0343	.0745	
			99.000	.0076	0807	0616	1851	
			120.000		0015	.1972	.4297	
		•	135,000		.0010	.0282	5534	
			1 90 .000		0264	.3083	4786	
			165.000		0749	.2849	2828	
			195.000			.2214	.2138	
			210.000			.2495	.2938	
			225.000			.1883	. 4238	
			240,000	4		.1788	.3480	
			270.000	0151	0987		.1616	
			300.000			0338	.0621	

ORIGINAL PLANTING

DATE B1 MAY 75 TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

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ARC11-0141A19 OTS+STRUT SRB-HI MPS-HI EXT TANK

(REUT20)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALFHA ( 3) = 3.657 BETA ( 1) = .009

X/L .634 .742 .851 .986

PHI

330.000 -.0186 .1311



# ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF EXT TANK

(REUT21) ( 22 OCT 74 )

RF	FFR	ENC	F	DA	TA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

## FARAMETRIC DATA

ELV-18 = 8.000 ELV-08 =

LREF = BREF = SCALE =	1290.3000 1290.3000 .0200		YMRP		.0000 400 .0000	IN. YT					RUCCER	<b>=</b> '	.000 1.000	MACH	=	1.40
SECTION	(1) EXTERN	AL TANK			DEF	ENDENT V	RTABLE C	Р .								
ALPHA (	1) = -4.200	BETA	(1)	= .0	03	X/L PHI	-634	.742	.851	.986						
						.000			- 0002	-0104				•		
						30,000		1419	0452	.0093						
						cco, co			0737	.0446						
						90.000	0231		0168	4786						
	1	•		•		120,000			0103	-3246						
	•					135,000			- 2008	. 4839						
						150,000		1158	.1824	.3917			•			
						165,000		1237	.1582	-21164					OF POOR	)
						195,000			0836	.0968					当党	).
						210,000			1080	.1838						ŝ
						225,000			0512	-3550					ÖĒ	٤
						240,000			0124	.2576					0, 7	٦
						270.000	0757	0708	07505	.4941					₩ E	-
						300.000			0655	.0482					ຄີ.	
						330.000			0457	-0014					9	Ď
ALPHA ( 2	2) =480	BETA	(1) =	= -4.00	OKO	X/L PHI	634	.742	.851	.986					POOR QUALITY	Œ
						.000			- 004.5	0.00		•			7	F7
						30.000		0663	0015 0220	0406						<b>-</b>
						60,000		.0045	.0289	.0224						
7.3						90.000	.0117	.0035		.0733						
						120.000	10111	.1267	•9129 •2901	.3119						
						135.000		.1340	.2392	. 5378						
		•				150.000		.1353	.3913	• 5770 • 6500			•			
		•				165.000		.1295	3819	.4960			•			
•						195.000		11233	0111	0648						
		*				210.000		•	8103							
					,	225.000			6939	.0087			•			
						240.000			0922	.2780	•					
						270.000	- 11805	1520	- 1011	-2181			•			
						300.000	,,,,,,,,	- 11 3621	1369	.3469 .0359						
	•					330 .000			0522	.0339						
					•					12/4/02/						
ALPHA ( 2	=291	BETA	(2) =	.01	2	X/L FHI	634	.742	.851	.986						
						.000			0056	.0304						
						30.000		1437		.0504		٠.				
						60 .000		0777		.0666						
						90.000	0191	0629		.3682			1			
								*******	***E 1 O							

# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT21)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VA	RIABLE CP			
ALPHA (2) =291 SETA (2) = .012	X/L PHI	634	.742	8 51	.986
	135,000		0446	1562	. 5534
	150.000		0894	.2374	.4402
	165,000		1047	2181	.2498
	195.000		12041	.1441	.1581
•	210.000			.1727	.2420
	225.000			.0594	4019
	240.000			.0796	3087
	270 .000	- 0479	0728	0736	3988
	390,000	10410	10.20	0579	.0680
				0321	
	330.000			0321	.0369
ALPHA (2) =306 BETA (3) = 4.028	X/L FHI	. 634	.742	.851	.986
· · · · · · · · · · · · · · · · · · ·	.000			0011	.0441
	30.000		2072	0579	.0493
•	60.000		1485	1511	.0266
	90.000	0599	1580	0843	.2660
	120,000		1880	0542	.2249
	135,000		1903	1612	.2404
	150,000		2046	.0261	-1152
	165.000		2831	0163	0408
	195,000		4	.3369	.4568
	210,000			.3548	45141
	225.000			.2753	.4460
	240,000			-2455	.4179
	270.000	-0031	0032	0393	.2402
	3000.0000		******	.0257	.ນເນນ
	330.000	*		0179	.0107
ALPHA (3) = 3.969 BETA (1) = .006	X/L FHI	. 634	.742	.851	.986
•	.000			.0215	.1574
	30,000		1512	0218	.1385
	60,4000		0811	0330	.0724
	90,000	.0070	0815	0700	.1735
	120,000		0034	.1951	.4211
	135,000		0022	. 0465	.5464
	150,000		0194	.30 52	.4656
	165.000		-,0748	.2789	.2762
	195.000			.2213	2105
•	210.000			.2539	.2924
	225,000			.1974	.4218
	240.000			.1954	.3448
	270.000	- 0117	- 1003	1210	.1460
	300.000	. 10111	11063		
•	2017 (1017)			0324	.0496



DATE DI MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT21)

SECTION ( 1) EXTERNAL TANK

DEFENDENT VARIABLE CP

ALPHA ( 3) = 3.969 BETA ( 1) = .006

X/L .742 .851

PHI

339.000 -.0176 .1340

PAGE 980

ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM EXT TANK

(REUT22) ( 22 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

8.000 ELV-CB = .000 ELV-18 = SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN, XT .000 MACH = 1.400 RUCCER = LREF = 1290.3000 IN. YMRP = .0000 IN. YT 1.000 GIMBAL = BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT

SCALE = .0200								
SECTION ( 1) EXTERNA	L TANK			DEPENDENT VAR	IABLE CP			
ALPHA ( 1) = -4.167	BETA	(1) =	.006	X/L	.634	.742	.851	.986
							0052	.0073
				30.000		- 1442	0504	.0085
							0782	.0429
	•			60.000	0004		0181	.4734
				90.000	0264	0580		.3270
•				120.000		0509	0144	.4856
				135,000			2025	
				150.000		1202	.1833	.3993
				165,000		1279	.1639	.2113 .0957
				195.000			.0828	
		•		210.000			.1095	.1810
				225.000			0546	3519
				240.000			0139	.2558
				2701.000	0779	0709		.4885
				300.000			0678	.0467
				330.000			0481	0014
ALFHA ( 2) =348	BETA	· ( <b>1</b> ) :	= -3.997	X/L PHI	. 634	.742	.851	.986
				.000			0021	.0400
				30,000		0658	0223	.0249
				en.con		-0053	.0296	.9772
				90.000	.0093	.0061	.0161	.3178
				120.000		.1274	.2884	- 5362
				135,000		1325	.2378	. 5757
				150.000		1338	.3902	. 6493
				165,000		.1275	.3790	.4982
				195.000				~.0585
	•			210.000	•		0029	.0115
				225.000			0934	.2770
				240.000			0937	2294
**				270.000	- 5015	1539		.3498
	•				-,0510	1 123	1414	.0379
•				300.000			0529	.0379
				330,000			· 11.0¢ 9	*11442
ALPHA ( 2) =366	BETA	( 2)	= .012	X/L PHI	. 634	.742	.851	.986
				.000			.0053	.0280
				30.000		-,1424	0360	.5492
				60.000			0802	.0706
				90.000	D183		0236	.3883
				120,000	103	0135		49.53
				1 20 (000)		- 121733	1,1,1,0,4	,,,

#### ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CF SETA (2) = +.366 BETA (2) = .012 X/L .742 PHI 135,000 -.0447 -.1488 .5567 150,000 -.0733 .2394 165,000 -.1045 .2293 .2530 195.000 .1434 .1618 210.000 .1717 .2394 225.000 JURUA .4019 240.000 .0783 .3107 270.000 ~.0487 -.0695 ~.0659 . 4085 300.000 -.0595 .0710 330.000 -.0316 .0353 ALPHA (2) = -.522 BETA (3) = 4.031 X/L . 634 .742 .851 .986 PHI .000 -.0016.(141)8 .30 .000 -.2094 -.0592 .0488 60 1000 -.1500 -.1521 .0273 90.000-.1581 -.0799 -.0612 .2677 120,000 -.1889 -.0525 135,000 -.1906 -.1665 .2365 150.000 -.2091 .0270 .1133 165.000 -.2931 -.0167 -.0330 195,000 .3309 210,000 .3529 · 4014 225.000 .2705 .4455 240,000 .2403 .4131 270.000 -0000 --0056 --0350 .2472 300.000 .0229 .0648 330.000 -.0212 .0127 ALPHA ( 3) = 3.942 BETA ( 1) = .012 X/L . 634 .742 .851 .986 PHI .000 .0203 .1610 30,000 -.1507 -.0212 .1409 e0.000 -.0804 -.0329 .0756 90,000 -.0822 -.0698 .1740 120.000 -.0033 .1998 .4267 135.000--.0015 .0436 . 5490 150.000 ~.0257 .3077 .4726 165.000 -.0735 .2822 .2779 195.000 .2231 -2057 210.000 .2521 .2942 225.000 .1985 .4238 240,000 .1821 .3464 270.000 -.0138 -.0998 -.1205 1532

300.000

- .0302

.0611

ORIGINAL PAGE IS
OF POOR QUALITY

(REUT22)

DATE 01 MAY 75 TABULATED SCURCE FRESSURE DATA - IA19 ( ARC 11-014 ) FAGE 982

ARC11-014IA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK (REUT22)

SECTION ( 1) EXTERNAL TANK DEFENDENT VARIABLE CP

ALPHA ( 3) = 3.942 BETA ( 1) = .012 X/L .634 .742 .851 .986

PHI

-.0175 .1352

330 .000

PAGE 983

DATE DI MAY 75

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT23) ( 22 CCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF LREF BREF SCALE	=	2690.0000 1290.3000 1290.3000	IN.	XMRP	=	76.0000 1 1 0000 1 1 0000 00	IN. YT					ELV-IB RUDDER GIMBAL	=	.000 .000 1.000	elv-cb Mach	.000 000
SECT	TON	(.1) EXTER	RNAL TANK	(		DEPEN	NDENT VA	ARIABLE CF								
ALPHA	C	1) = -4.04	7 BETA	(1) =	= .00	9	X/L	. <b>634</b>	.742	.851	.986					
							PHI									
							.000				2593		•			
4.							30.000			0050						
					•.		60.000									
							90.000	0405	0236		.1985					
							20.000		.0073		.0274					
	•			•			135.000		.0186							
		•					50 .000		.0148	.0882	1301					
							65.000		0102		0977					
							195.000				1624					
							210.000				0192					
		•					225.000			0185	.2574					
							240 -000	0.40	13000		0208					
							270 .000	416	0282	.0070	.1681					
							000.000				~.1757					
						3	30,000			- (tries	2921					
AI PHA		2) = -,27	76 AFTA	( 1) =	= =4.00	4	X/L	. 634	.742	.851	.986					
	•		יייייייייייייייייייייייייייייייייייייי		4 1 1 1 7 1		PHI	.034	. 142	.031	•300					
							.000			nnon	2542					
							30.000		0789		2643					
							60.000		0304		1828					
•							90.000	.0259	.0396	0136	.1153					
							20.000	10,233	1153	-1300	.1732					
							35.000		.1264	.1007	51 60					
							50.000		.1548	2863	3880				•	
					• .		65.000		.1097	.2402	.1281			•		
							95.1330		• • • • • • • • • • • • • • • • • • • •		2399					
							10.000				1050					
							25.000			0778	.1456					
							40.000				0500					
							70.000	1085	0976	0276	1396					
		••					סטס. סט				1816					
							30.000				2788			·		
ALPHA	. ( 2	2) =23	7 BETA	(5)=	.009		X/L PHÏ	. 634	.742	.851	.986					
				•.	•		.000			.0441	2253					
							30.000		1166		2312					
							ea .aaa		0845		1764					
											4					

90.000 -.0521 -.0226

.0291

120,000

# ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT23)

SECTI	ON ( 1	) EXTERNA	L. TANK			DEI	PENDENT VAR	RIABLE CP			
ALPHA	(2) =	237	BETA	( 5)	Ξ	.009	X/L PHI '	. 634	.742	.851	.986
							135,000		.0393	.0133	.3946
							150.000		.0410	.1541	.1594
							165.000		.0162	.1297	0734
							195,000	*		.0584	1012
							210,000			.1287	.0437
							225.000			.0358	.3775
							240.000			.0359	.0861
	•	_					270.000	0517	0256	1.0070	.2259
							300 -000			.0195	1598
							330,000			.0170	2486
ALPHA	(2) =	195	BETA	( 3)	=	4.028	X/L FHI	. 634	.742	.851	.986
		• •					.000			.0197	2394
							30,000		1395	.0027	- 2365
							eo.ooo		1284	0186	1657
							90,000	1041	1059	0141	2000
							120,000		0903	0705	0590
							135.000		1136	0793	.1134
					•		1 50 .000		1521	0278	0189
							165.000		2184	0558	1955
							195.000			.2127	• 1 500
							210,000			.2718	.1390
							225.000	•		1359	.3921
				•			240.000			.1365	.1124
							270.000	-0151	.0440	.0049	.1314
							300+000			.0407	1600
							330.000			-0141	2580
ALPHA	( 3) =	3.855	BETA	(1)	=	.003	X/L FHI	. 634	.742	.851	.986
							.000				2340
							30 ,000		1487	0037	
							60.000		1168	0161	1845
	42					•	901.000	0541	0590	0871	1029
	1						129,000		.0402	.0710	1294
			100				135,000		.0551	.0284	.4589
							150.000		.0608		.1681
							165.000		.0394	.1336	0606
						•	195.000	•		.0890	1065
							210.000			.1 588	-0453
							225.000			.0689	.4010
							240.000			.0709	.0809
							270.000	0554	0726	0920	.1001
•							300.000		*	0118	1785



PAGE 985

TABULATED SCURCE PRESSURE DATA - TA19 ( ARC 11-014 ) (REUT23) ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

DATE O1 HAY 75

X/L .634 .742 .851 .986 ALPHA ( 3) = 3.855 BETA ( 1) = ...003

₽₩Ĭ -.0035 -.2682 330.000

#### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT24) [ 22 OCT 74 ]

		REFERENCE DA	TA			•				PARAMETRIC	DATA	
	SREF = LREF = BREF =	2600.0000 SQ.FT. 1290.3000 IN. 1290.3000 IN.	YMRP # .0	000 IN. XT 000 IN. YT 000 IN. ZT	. •	•			ELV-IB = RUCDER = GIMBAL =	.000 .000 1.000	ELV-CB = MACH =	.000 1.109
-	SCALE =	*0500										
	SECTION	I ( 1) EXTERNAL TANK		DEPENDENT VA	RTABLE CP							
	ALPHA (	1) = -3.993 BETA	(1) = .009	X/L	. 634	.742	.851	.986				
				.000			.2244	.0021				
				30,000		.0370	.2160	.0347		•		
				60.000		.0628	-21 55	.1448				
		•		90,000	0847	.0740	.2117	.3984				
				120,000		.1009	.1761	.1141				
				135,000		.1161	.1785	.3414			200 G	
				150,000		1052	-2519	.2746			- <del> </del>	
				165.000		.0655	.2177	.0513			EGINAI POOR	
	•	,		195,000			.1793	-0263			OOR C	
		· ·		219.000			.2212	.1367			H.	
				225,000			.1795	.3165				
				249.000			-1502	.0887			್ ಜ್ಞ	
				270 .000	0751	·0646	-2006	.3697			PAGE QUALIT	
				309.000			.2177	.1636			$\Xi$	
		•		330+000			-2143	.0219			日田	
	ALPHA (	2) =279 BETA	( 1) = -4.003	X/L FHI	. 634	.742	.851	.986			QUALITY	
				.000			.1991	-0157				
				30.000		.0303	.2039	.0009				
				eo .coo	. •	0966	.2233	.0441				
				90.000	-1057	1870	.2154	.2681				
				120,000		.2521	.3321	3706				
				135,000		2632	-3/351	6491				
				150.000		·28@1	.4571	. 5402				
				4.00 (31313								

165,000

195,000

210,000

225.000

240.000

270.000

300.000

330.000

ALPHA ( 2) = -.246 BETA ( 2) =

X/L . 634 .742 .851 .986 PHT . .000 .2093 .0159 30.000 .1990 .0271 -.0434 60.000 .0079 .0734 .2014 90.000 -.0062 .1044 .2325 .2825 120.000 .1536 .2209 .2142

-.0786

.2381

.0234

.4238

.0576

.0511

.0562

.1435

.1609

.1846

.3206

.0210

.2482

.0328

.2325

.1345

.0137

.0366 -.0886



ARC11-D14TA19	THIRTSISTO	con occ	NOC OFF	CVT TALK	
ARLIT-!ITA!ATG	O(3+51RUI	SKM~(FF	MISHIE	PAL IAN	

(REUT24)

					•							CAL TAN
SECT	ION (	1)(	EXTERNA	L TANK				DEPENDENT VAR	RIABLE CF			
ALPHA	( 5)	Ξ	246	BETA	( 2)	=	.009	X/L FHI	. 634	.742	.851	.986
								135.000		.1589	-2192	.416
								150.000		-1 520	.3020	.315
								165.000		.1175	.2637	.092
								195.000			-2319	.073
								210.000			.2719	.177
								225:000			.2223	4172
								240.000			.2216	.163
								270.000	.0055	.1010	.2270	.279
								30a.aaa		* 1 (1111	.2093	
								330 .000			.2093	.016
						•		gga (tra)			1.1223	(117.6)
ALPHA	( 2)	= ,	273	BETA	(3)	=	4.025	X/L FHI	. 634	.742	.851	.986
											4001	240
								.990		0040	.1921	.018:
								30.000		.0210	1809	.027
								60.000	/4 <b></b>	.0132	.1419	.127
								90.000	0775	- 0006	.1123	.261
								120.000		0113	.0032	.019
								135.000		0489	0264	.257
				•				1 50 ,000		1035	0322	.025
								165.000		1154	0491	104
								195.000			.3843	•310
								210.000			.4256	318
								225.000			.3181	. 510
								240.000	2		.3103	.2939
•								270.000	.1132	.1833	-5036	.271
								300.000			.2240	-0512
2 * * * 1								330.000			.1994	0128
ALPHA	( 3)	Ė	3.804	BETA	(1)	=	003	X/L	. 634	.742	.851	.986
					• •			PHI				
								-000			.1781	.0127
								30,000		0416	.1681	.0020
								00.000		.0219	1635	•0550
						•		90.000	.0836	.1184	1 559	2503
								120,000		.1857	.2721	.2895
								135.000		.2001	.2625	.4753
								1 50 .000		.1986	.3375	-3317
								165,000		.1750	.3043	.1111
								195.000			.2721	.1057
	: ·							210.000			·31 RO	1909
								225.000			.2683	.3604
				•				240.000			.2701	.2159
	•			•				240 -000 270 -000	.0900	.1128	.2701 .1525	·2158

OF POOR QUALITY

DATE OF MAY 75 TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

PAGE 988

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT24)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.804 BETA ( 1) = -.003

X/L

.634 .742 .851 .986

330.000

.1679 ~ .0081

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ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT25) ( 22 CCT 74 )

#### REFERENCE DATA

### PARAMETRIC DATA

SRE	F =	5690	.noon s	Q.FT.	XMRP	=	976.0000	IN. XT	• .				ELV-IB	=	.000	ETA-CB	. =	.000
LRE	F =	1290	.3000 T	N.	YMRP	=	.0000	IN. YT					RUCCER	=	000	MACH	=	1,250
			.3000 I		ZMRP		400.0000						GIMBAL	=	1.000			
	NLE =		.0200		,					•								
			FW7 F0				ner.	monut u	101101 F C									
St	CHON	. (1)	EXTERNA	LIANK			UEF	FUCENI V	ARTABLE CF	•								
ALF	) AHF	1) =	-3.975	BETA	(1)=	0	93	X/L	. 634	.742	.851	.986						
								FHI.										
								.000			.0192	.0673						
								30,000		1949	0309	.0705						
								ea .coo		1233	0373	.0459						
								90.000	0605	0977	.0200	2613						
								120.000		0635	0081	.2892						
								135.000		0655	1398	.4637						
				•				150.000		0651	.1838	.3552						
								165.000		2001	.1652	.1492						
								195,000			.0851	.0481						
								210.000			.1288	.1455						
								225.000			0518	.3557						
					- '			240,000			0427	.2141						
								270.000		0916	.0047	.2710						
								300.000			0399	.0529						
								330.000			0309	.0675						
ALF	HA" (	2) =	255	BETA	(1) =	-4.0	90	X/L	. 634	.742	-851	.986						
								PHI					\					
								.000			.1765	.0987	\					
								30.000		0976	.1970	.0890						
						•		60 (000		0251	.2075	.1246						
					•			90.000	0377	.0003	.1030	:3141						
	-							120.000		.0857	3357	. 4941						
								135,000		.0937	.2850	.6572						
								150,000		.0940	.4452	. 5996						
								165.000		.0113	. 4258	. 40 58						
								195.000			0137	1003						
								210.000			0172	0173						
								225,000			0741	.2792						
•								240.000			1212	.1737						
								270,000		2175		.3994						
								300.000			.0736	.0794						
								330.000			.1616	.0960	•					
ALF	HA (	2) =	285	BETA	(2) =	0	12	X/L	. 634	.742	.851	.986						
-								AH!		76		. 30 0						
								.000			.1595	.0882						
								30.000		1842	-1558	.1035						
								90.000		1189	.0957	.1069	-					
								90.000		1096								
								プル・しんだ!	0528	- 17120	.0410	.4185						

-.0683

120,000

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT25)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	DEPENDENT VARIABLE CP					
ALPHA (2) =265 BETA (2) = .012	X/L FHI	، 634	.742	.851	.986		
	135,000		0494	.0832	. 5207		
	150,000		0469	.2657	.3999		
•			1741	.2495	.1983		
	165.000		-11/41	1615	.1119		
	195,000			.2914	.2159		
	210.000			.1161	.4216		
	225,000 240,000			.1162	.2780		
	270.000	0640	- 1058	.0095	.4517		
	300,000	- Model	-11030	.0713	1128		
	330,000			.1385	.0923		
ALPHA (2) =189 BETA (3) = 4.031	X/L PHI	.634	.742	.851	.986		
	.000			.1663	.0967		
	30,000	•	2627	.1526	•0959		
• 1	60.000		2123	.0620	.0794		
	90,000	1074	2447	0360	-3540		
	120,000		2216	1481	.17019		
	135,000		1589	1915	.2195		
	150.000		1566	0397	.0361		
	165.000		1719	0808	1068		
	195,000			.3582	.3897		
	210,000			.3815	.3669		
	225.000			.3973	. 5071		
	240.000			-3067	.4011		
	270.000	.0335	.0143	.0970	.3216		
	300.000			.2019	.1125		
	330.000			1876	.0734		
ALPHA ( 3) = 4.005 BETA ( 1) = .003	X/L FHI	. 634	.742	.851	.986		
•	.000			.2484	.1041		
	30.000	•	1868	.2240	.0843		
	60 .000		1152	.2006	.1206		
	90.000	0322	1278	.0738	.3080		
	120,000		0443	.2621	.3742		
	135,000		0253	.2523	.4928		
	150.000		0619	.3343	. 41 56		
	165.000		1582	.2994	.2155		
	195.000			.2432	.1506		
	210.000			.2785	.2523		
	225,000			.2416	. 4933		
	240.000			.2429	.2913		
	270.000	0587	1204	.0423	-3165		
	300.000			.1928	.1071		
	water paretol						

DATE 01 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-OFF HES-OFF EXT TANK

(REUT25)

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

ALPHA (3) = 4.005 BETA (1) = .003 X/L .634 .742 .851 .986

PHI .

.2172 .0736 330.000

ARC11-014TA19 OTS+STRUT SR8-OFF MPS-OFF EXT TANK

(REUT26) ( 22 CCT 74 )

#### REFERENCE DATA

## PARAMETRIC DATA

SREF	=	2690.0000 SQ.FT.	XMRP	2	976.0000 IN.	XT	ELV-18 =	.000	ELV-08 =	,000
LREF	x	1290.3000 IN,	YMRP	=	.0000 IN.	YT	RUCDER =	.000	MACH =	1.400
BREF	=,	1290.3000 IN.	ZMRP	=	400.0000 IN.	ZT	GIMBAL =	1.000		
SCALE	=	.0200								

-.0174

.0777

,4021

SECTION ( 1) EXTERNAL TANK	DEPENDENT VA	RIABLE C	P	•	
ALFHA (1) = -3.909 BETA (1) = .009	X/L PHI	634	.742	.851	.986
	.000			.0002	.011
	30.000		1447	0461	.011
	. 60,000			0721	.044
	90.000	0237	0558		.481
	120,000		0459	0065	.324
	135,000		0783	2006	. 491
	150.000		1151	.1848	.393
	165.000		1231	-1604	-293
	195.000			.0840	.095
	210,000			-1110	.181
	225.000			0490	.357
	240,000			0093	.259
	270.000	0782	0713	0517	. 498!
	300,000			0663	.049:
	330.000			0451	.003
ALPHA (2) =243 BETA (1) = -4.000	X/L	634	.742	.851	.986
	PHI				
	.000			.0011	.041
	30.000		0661	0196	.0240
	60.000		.0047	.0318	.0749
	90.000	.0115	0025	.0135	-3122
	120,000		.1278	.2931	. 541 7
	135,000		.1345	.2424	. 58 60
•	1 50 .000		-1364	.3948	. 6539
	165.000		.1302	.3878	.4997
•	195.1000			0104	0659
	210,000			0018	.0093
	225,000			0898	.2803
	240.000			<b>~.</b> l1925	.2218
	270.000	0878	1525	1030	.3520
· · · · · · · · · · · · · · · · · · ·	300 .000			1375	.0378
	330.000			0511	·D461
ALPHA ( 2) =237 BETA ( 2) = .012	X/L FHI	. 634	.742	.851	.986
	.000			.0033	.0255
	30.000		- 1460		
	90 .000		1458		.0455
			0788	0620	.0647
	90.000	0203	0654	0323	.3675

ORIGINAL PAGE IS OF POOR QUALITY

# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT26)

SECTION ( 1) EXTERNAL TANK	DEPENÇENT VAF	RIABLE CP			
ALPHA ( 2) =237 BETA ( 2) = .012	X/L	. 634	.742	.851	.986
	FHI			4 - 77	
	135.000		0450	1577	
	150.000	•	0717	.2349	.4391
	165.000		1067	.2154	.2450 .1497
	195.000			.1423	
	210.000			.1700	.2346
	225.000			.0563	. 401 4
	240.000	17.674	0734	.0781	.3976 .3976
	270.000	0501	0734	0609	.0655
	300 -000 000 -000			0337	.0324
	550,000			-,0351	10364
ALPHA (2) =234 BETA (3) = 4.031	X/L PHI	. 634	.742	.851	.986
	.000			0017	.0439
	30,000		2100	0583	.0497
	60.000		1514	1552	.0252
	90.000	0613	1809	0888	.2743
	120.000		1900	0590	.2229
•	135.000		1864	- 1639	.2372
	150.000		2087	.0240	1029
	165.000		- 2975	0203	0579
	195.000			.3345	4533
	210.000			.3537	.4030
	225,000			.2735	.4480
	240.000			.2452	. 41 54
	270,000	.0026	0065	0405	.2339
	300,000			.0242	.0587
	330,000			0216	.0120
ALPHA (3) = 4.047 BETA (1) = .006	X/L	. 634	.742	.851	.996
· · · · · · · · · · · · · · · · · · ·	PHÍ				
	.000			.0217	.1 608
	30.000		1 539	0179	.1456
	60.000		0840	0324	.0784
	90.000	.0050	0870	0788	1 690
	120,000		0050	.1926	.4217
	135.000		0018	.0397	• 548 6
	150.000		0201	3.719	.4646
•	165.000		0767	.2761	.2676
•	195.000		•	.2229	.1979
	210.000			-2503	.2914
	225.000			1950	.4228
	240.000			1964	.3386
	270.000	0148	1037	1248	.1428
	300.000			0800	.0560

DATE OI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 994

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT26)

SECTION I STERNAL TANK

DEPENDENT VARIABLE CP

ALPHA (3) = 4.047 BETA (1) = .006

X/L .634 .742 .851

FHI

330.000 -.0206

ORIGINAL PAGE IS OF POOR QUALITY

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DATE DI MAY 75
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## TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

PAGE 995

.000 .900

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT27) ( 22 CCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF	=	269	0000.0	SQ.FT.	XMR	F :	97	6.0000	IN. XT			*		ELV-18 =	.000	ELV-OB =
LREF	=	129	0.3000	IN.	YMR	P =	:	.0000	IN: YT		•		•	RUDDER =	.000	MACH =
BREF	=	129	0.3000	IN.	ZMR	P =	= 40	0.0000	IN. ZT					GIMBAL =	1.000	
SCALI	E =		.0200													
SEC	T CN	. ( 1	) EXTERN	AI TARM	,			DEC	CHINCHT I	VARIABLE C						
			/ L N   U(I	AC 1416				UEF	EMPEM!	YARIADLE C	F					
ALPH	A (	1) =	-4.125	BETA	(1)	=	.000		X/L	. 634	.742	.851	.986			
									FHI - 200	1		0000	2632			
									30.000		- 1140	0096				
		•							60.000			0098	1966			
									90.000		0316					
									120.000			0296	.1914			
									135.000		.0111		.0034		0	0
											.0099	0470	.2623			Ž
			•						150.000				.1189		hard (	ਨ
									165.000		0170		1201		Ŏ,	<b>3</b>
									210.000				1753		2	₹
													0256		20	<del>-</del>
									225,000 240,000			0286	.2630	_	ව ි	
											- 0530	0278	0094		Ü,	<u>ק</u>
									270.000		0379		.1738		<u> </u>	5
									300.000				1864			된
									330 .000	J		0106	2971		OF POOR QUALITY	- 
ALPH	(	2) =	396	BETA	(1)	= -	4.003		X/L	. 634	. 742	.851	.986		<b>P</b> 4 5	מ
									PHI							
							£		.000	)		.0046	2592			
									30,000	1	0885	0006	2698			
									60 .000	)	(1395	.0172	1968			
									90,000			0162	.1112			
									120.000		.1092	.1295	.1642	•	•	
									135,000		1207	.0983	5082			
					•				150,000		-1 573	.2841	.3784			
									165.000		.1042	-2366	-1148			
									195.000			0569	2431	-		
									210,000	1			- 1070			
									225.000	1		0807	-1490			
									240.000		•		0477			
									270.000	1127	1043		.1584			
									300.000				1889			
									330.000	. *		0156				
				•									•			,
ALPHA	( 8	?) =	408	BETA	(2)	=	.009		X/L	. 634	.742	.851	.986			
									FHI			,				
								•	.000			.0325	2428			
									30.000		1241		2506			
									eo . ooo		0885		- 1916			•
,			•						90.000	0574	0340	.0016	2008			

120.000

.0264

(REUT27)

## ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA	(5) =	408	BETA	(	5)	=	.009	X/L PHI	. 634	.742	.851	986
								135.000		.0357	0032	.3857
								150,000		.0398	.1494	1513
								165.000		.0160	1002	0882
								195,000			.0516	1341
								210,000			.1278	.0244
								225,000	١		.0337	3634
								240.000	1		0008	0734
								270.000	0514	0369	0049	2176
								300,000	75.7	11.000	.0137	1811
								330.000			.0117	2672
								000, 70,2,0				
ALPHA	(5) =	336	BETA	(	3)	=	4.025	X/L	. 634	.742	.851	986
								FHI			12/200	- 0407
								.000			.0069	2497
								30.000		1448	0094 0334	2540 1781
								60.000	- 4000	1377		
								90.000	1068	1172 0961	0308	0639
								120,000 135,000		1178	0958	1091
								150.000		1546	0402	0207
								165.000		2224	0664	2123
								195.000		2224	.2056	.1304
								210.000			.2625	1212
								225.000			.1273	.3771
								240.000			.0926	.0960
								270.000	.0143	.0371	0070	.1187
								300.000	.0143	10311	.0320	1832
	•							330.000			.0045	2764
								Janeta			10043	.2104
ALPHA	(,3) =	3.792	BETA	(	1)	=	003	X/L PHI	. 634	.742	.851	.986
	,• ' ,•							.000			.0221	2368
								30.000		1519	.0036	2529
								60.000		1200	0114	~.1985
								90.000	0 <del>0</del> 05	0631	0820	0971
,								120,000		.0386	.0740	.1226
								135,000		·D543	.0310	.4567
								1 50 .000		.0631	.1763	.1696
			-					165.000		.0392	1361	0735
								195,000			.0889	1162
								210,900			-1606	.0404
								225.000			.0724	.4027
								240.000			.0358	.0806
	•							270.000	0589	0796	0896	.1062
•								300.000			0100	1839



DATE DE MAY 75 TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

PAGE 997

ARC11-8141A19 OTS+STRUT SRB-NOM MPS-NOM-EXT TANK

(REUT27)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.792 BETA ( 1) = -.003

X/L .634 .742 .851 .986 PHI

339,000 -.0014 -.2719

# ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM EXT TANK

(REUTES) £ 22 OCT 74 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2800.0000 SG.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XHRP = 976.0000 IN. XT YHRP = .0000 IN. YT ZHRP = 400.0000 IN. ZT	ELV-IB = RUCDER = GIMBAL =	.000 ELV-CB = .000 MACH = 1.000	.000 1 -100
SECTION ( 1) EXTERNAL TANK	DEFENDENT VARIABLE CP			

SECTION ( 1) EXTERNAL TANK	DEI-ENDENT VAN	CIABLE CF			
ALFHA ( 1) = -4.191 BETA ( 1) = .002	X/L FHI	. 634	.742	.851	.986
	.000			.2232	.0001
	30.000		.0155	.2153	.0333
	60.000		.0519	.2150	.1559
	90.000	0792	.0673	.2020	. 41 70
	120,000		.1085	.1741	.1066
	135,000		.1191	.1739	.3289
	150.000		.1084	.2485	.2714
	165.000		10701	.2153	0511
	195,000			.1720	.0273
	210,000			.2191	.1322
	225.000			.1728	.3125
	240.000			.1478	.0861
	270.000	(1648	.0540	.1940	.3780
	300.000			-2161	.1683
i 1 k <del>a</del>	330.000			.2132	.0193
ALPHA (2) =465 BETA (1) = -4.003	X/L	. 634	.742	.851	.986
	PHI				
	.000			.2040	0194
	30.000		.0310	.2078	.0044
	60.000		.1016	.2281	.0485
	90.000	.1089	.1905	.2228	.2781
	120.000		2536	.3344	.3645
	135.000		.2655	.3068	6510
	150.000		.2881	.4567	. 5399
	165,000		-2401	.4243	•3200
	195,000			.0352	0809
	210.000			.ຕອກ2	.0285
	225.000			.0589	.2481
	240.000			.0539	.0297
	270.090	0775	.0210	.1502	.2397
	300,000			.1672	.1440
	330.000			.1996	.0182
ALPHA (2) =447 BETA (2) = .012	X/L PHI	.634	.742	.851	.986
	.000			.2127	.0189
	30,000		0425	.2030	.0316
	60 - 000		.0066	.20 59	.0788
	90.000	0126	.1017	.2382	.2757
	120.000		.1456	.2224	.2123
	a par e elector			,	



(REUT28)

· · · · · · · · · · · · · · · · · · ·	IRC11-014IA19. OT	S+STRUT S	RB-NOM N	IPS-NOM E	XT TANK	
SECTION ( 1) EXTERNAL TANK	DEPENDENT VAL	RIABLE CF	•			
ALFHA ( 2) =447 BETA ( 2) = .012	y X∕L	. 634	. 742	8 51	.986	
	PHI					
	135,000 :		.1536	.2297	.4122	
	1 50 .000		.1456	-3013	. 31 68	
	165.000	•	.1117	.2661	.0900	
	195,000			.2300	.0709	
	210,000			.2686	.1815	
	225,000			.2236	4060	
	240.000			-51135	.1662	
	270.000	0022	.0961	.2293	2823	
	300.000			-2138	.1110	
	330,000		•	-2035	.0219	
ALPHA ( 2) =405 BETA ( 3) = 4.031	X/L	. 634	.742	.851	.986	-
	FHI					
	.000			.1947	.0212	
	30.000		.0241	.1848	.0319	
	eo .con		.0157	.1458	.1351	
	90,000	0798	•0003	.1112	.2678	
	120.000		0131	.0068	.0141	
	135.000		0491	0283		
	150,000			0333	.0270	
	165.000		1110	0555	1000	
	195.000			∙38€2	.3091	
	210.000			.4249	-3170	
	225,000			.3191	.5112	
	240.000			.2954	.2974	
	270.000	.1111	.1850		.2805	
•	300.000			.2264	.0540	
	330,000			-2025	- 0113	
ALPHA (3) = 3.819 BETA (1) = .009	·	- 654	.742	.851	.986	
	(HI					
	.000			.1797	.0153	
	30.000		0381	1715	.0042	
	60.000		.0244	.1678	.0262	
	90.000	.0786	.1138	.1562	.2610	
	120,000		.1818	:2761	.2975	
	135.000		.1963	268!]	.4736	
	150.000	•	.1938	.3416	∙33€2	
	155.000		.1723	.3080	-1151	
	195.000			.2743	.1056	
	210.000			-3163	.1971	
	225.000			.2737	.3646	
	240.000			.2531	.2216	٠
•	270,000	.Ü654	.1127	-1516	2583	

300,000

.1704

.0316

ORIGINAL PAGE IS

DATE OF MAY 75

TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

PAGE 1000

ARC11-014TA19 OTS+STRUT SRB-NON MPS-NON EXT TANK

. (REUT28)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.819 BETA ( 1) = .009

X/L PHI

.742 .851 .986

330.000

.1713 -.0061



PAGE 1001

.000 1.250

### ARC11-014TA19 OTS+STRUT SRB-NOM MES-NOM EXT TANK

(REUT29) ( 22 OCT 74 )

OFF	6	•	~	2	TA

REFERENCE DATA				•	PARAMETRIC DATA
SREF = 2690.0000 SQ.FT. XMRP =	976.0000 IN. XT		•	ELV-18 =	.000 ELV-08 =
LREF = 1290.3000 IN. YMRP =		•		RUDDER =	
BREF = 1290.3000 IN. ZMRP :		•		GIMBAL =	
SCALE = .0200			•	OTHERE E	2 stricts
	·				
SECTION 4 1) EXTERNAL TANK	DEPENDENT VA	RIABLE CP			
ALPHA ( 1) = -4.080 BETA ( 1) =	.006 X/L	634 .742	.851 .9	86	
	HI.				
	.000		.0211 .0	730	
	30.000	1888	0311 .0	769	
	eo.ooo	1198	0396 .0	316	•
	90.000	05980963	.0208 .2	564	
	120,000	0648	0024 .2	857	
	135.000	0678	1298 .4	653	
	150.000	0604	.1858 .3	597	
	165.000	1995	.1705 .1	539	
•	195,000		.0874 .0	<b>5</b> 00	
	210,000		.1396 .1	483	
	225.000		0515 .3	586	
	240.000		0284 .2	162	
	270.000	06600914	.0065 .2	756	
	300.000		0407 .0	613	
	330.000	•	0274 .0	743	
ALPHA ( 2) =375 BETA ( 1) = -	3.997 X/L	.634 .742	951 0	oe.	
	PHI	1004 1142	.851 .90	96	
	.000		1762 .19	346	
	30.000	0929		944 -	
	90.000	0229		508	
	90.000	.0403 .0028		275	
	120,000	.0860		955	
	135,000	.0956		545	
•	150.000	.0983		132	
	165,000	.0167	.4246 .41	•	
	195,000		011609		
•	210.000	-	.002300		
	225.000			910	
	249.000			767	
	270.000	13062157		87	
	300.000			159	
	330 .000		·1506 ·10		• *
	•	•		<del></del>	
ALPHA (2) =408 BETA (2) =	.012 X/L	.634 .742	.851 .98	16	
	rhi :				
	.000		.1545 .08	74	
	30.000	1820	.1338 .10	19	

000.00 90.000

120,000

-.0533 -.1094

.0350

-.0721 -.1502

## ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT29)

SECTION ( 1) EXTERNAL TANK	DEFENDENT VARIABLE CP			
ALPHA (2) =408 BETA (2) = .012	X/L .634 PHI	.742	.851	.986
	135,000	0587	.0635	. 52 52
	1 50 .000	0477	.2647	.4047
	165.000	1805	.2429	.2033
•	195.000	14003	.1583	.1092
•	210.000		.1956	.2137
	225.000		.1097	4195
	249.000		1018	.2759
	270.0000633	-,1084	.0066	4560
	300.000	-11004	.0629	.1119
	330 -000		-1132	.0930
•	33010000		FITSE	•613361
ALPHA ( 2) =381 BETA ( 3) = 4.031	X/L .634	.742	.851	.986
	.000		.1689	.1040
	30,000	2565	.1478	.1027
	0000.09	2090	.0617	.0800
	90.0001073	2401	0127	3517
	120,000	- 2220	1370	.1735
	135,000	1546	1837	.2255
	150.000	1522	0310	.0495
	165,000	1663	0708	0919
	195.000		.3619	·3863
	210.000		.3871	.3675
	225,000		-3013	5034
	240.000		.2772	.3997
	270.000 .0302	.0200	.0873	.3325
	300 -000		.2049	.1224
	330.000		.1944	.0790
ALPHA ( 3) = 3.843 BETA ( 1) = .003	X/L .634 FHI	.742	.851	.986
	.000	*	.2549	.1058
	30.000	1813	-2305	.0855
	eo.000	1117	-2965	.1245
	90.0000315	1297	.0817	.3133
	120,000 .	0391	.2694	.3777
•	135.000	0214	.2645	.4991
•	1 50 .000	001	.3412	.4238
	165.000	1536	.3083	.2210
	195,000		.2516	-1550
	210.000		.2834	-2547
• •	225.000		.2493	.4085
	240.000		2389	2920
	270.0000577	1220	.0536	.3418
	300.000		.2064	-1144



TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT29)

PAGE 1003

SECTION ( 1) EXTERNAL TANK

DATE DI MAY 75

DEPENDENT VARIABLE CP

ALPHA (3) = 3.843 BETA (1) = .003 X/L .634 .742 .851 PHI

330.000 .2277 .079

ORIGINAL PAGE IS OF POOR QUALITY ARC11-014IA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT30) ( 22 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SCALE = .0000  SECTION (1) EXTERNAL TANK  DEPENDENT VARIABLE CP  ALPHA (1) = -4.224 BETA (1) = .006  PHI .00000053 .0069 30.000 -1.446 -0.0497 .0075 60.0000 -0.067 .0089 -0.075 .0429 90.000 -0.067 .0589 -0.075 .0429 120.000 -0.067 .0589 -0.075 .0429 90.000 -0.067 .0589 -0.075 .0429 120.000 -0.067 .0899 .0492 120.000 -1.067 .0893 .0893 135.000 -1.0892 .0266 .4885 139.000 -1.1270 .1361 .2202 195.000 -0.0845 .0889 210.000 -0.0765 -0.0735 -0.510 .0889 225.000 -0.0865 .0889 227.000 -0.0766 -0.0735 -0.510 .0864 300.000 -0.0766 -0.0735 -0.510 .0864 ALPHA (2) =444 BETA (1) = -3.997  XL .634 .742 .851 .986 HI .000 -0.063 .0224 .0234 60.000 .0092 .0092 .0093 .0093 .0094 1257 .0204 .0373 .3191 120.000 .1257 .2014 .3234 60.000 .0092 .0092 .0073 .3191 120.000 .1257 .0594 .0578 135.000 .1267 .0278 .0578 135.000 .1267 .0294 .0378 135.000 .1267 .0295 .0399 155.000 .1096 .0092 .0092 .0093 .0094 221.000 .1257 .0094 .0095 .0094 221.000 .1257 .0096 .0095 .0094 221.000 .0096 .0096 .0096 .0096 .0096 .0096 221.000 .0096	LREF = 1290.3000 IN. YMRP = 8REF = 1290.3000 IN. ZMRP = 46	76.0000 IN. XT .0000 IN. YT 00.0000 IN. ZT			ELV-IB = RUDDER = GIMBAL =	.000 000. 1.000	ELV-CB = MACH =	.000 1.400
ALPHA (1) = -4.224 BETA (1) = .006  ALPHA (1) = -4.224 BETA (1) = .006  ALPHA (1) = -4.224 BETA (1) = .006  ALPHA (2) = -4.424 BETA (1) = .006  ALPHA (2) = -4.424 BETA (2) = .016  ALPHA (2) = -4.05 BETA (2) = .016  ALPHA (3) = -4.05 BETA (2) = .016  ALPHA (4) = -4.05 BETA (2) = .016  ALPHA (2) = -4.05 BETA (2) = .016  ALPHA (3) = -4.05 BETA (2) = .016  ALPHA (4) = -4.05 BETA (2) = .016  ALPHA (6) = -4.05 BETA (6) = .016  ALPHA (7) = -4.05 BETA (7) = .016  ALPHA (8) = -4.05 BETA (7) = .016  ALPHA (8) = -4.05 BETA (8) = .016  ALPHA (9) = -4.05 BETA (9) = .016  ALPHA (10) = -4.05 BETA (10) = .016		DEPENDENT VARIA	BLE CP					
HI								
	ALFHA ( 1) = -4.224 BETA ( 1) = .000		634 .742	.851 .986	•			
20.000					_			
COLDOD  0769  0775   .0429								
99.000026705890198 .4792 120.0000270136 .3263 135.0000292066 .4883 129.0001195 .1822 .4023 129.0001195 .1822 .4023 129.0001270 .1581 .2072 129.50001270 .1581 .2072 129.50001270 .1581 .2072 129.50000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000128 .2572 129.00000289 .0399 129.0000 .0092 .0042 .0039 129.00000663 .0224 .0234 129.00000663 .0224 .0234 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .2407 .5776 129.0000 .1321 .3399 .9313 129.5000 .1254 .00376 129.0000 .10000 .10000 .254								
120_000	•	•					*	
135.000	• • • • • • • • • • • • • • • • • • • •							
191.020							•	
165.000								
195.000								
210.000			1270					
225.000								
240.020079607350510 .4964 320.020079607350510 .4964 320.0200689 .0462 330.02008990014  ALPHA (2) =444 BETA (1) = -3.997  X/L .634 .742 .851 .986  PHI								
270.000079607350510 .4964 300.0000669 .0462 330.00000689 .0462 330.000004890014  ALFHA (2) =444 BETA (1) = -3.997  X/L .634 .742 .851 .986  PHI .00006530224 .0234 60.000 .0092 .01942 .0297 .0767 90.000 .0092 .01942 .0297 .0767 90.000 .0092 .01942 .0297 .0767 120.000 .1257 .2904 .5378 135.000 .1321 .2407 .5776 150.000 .1316 .3890 .5539 165.000 .1316 .3890 .5539 165.000 .1316 .3890 .5539 165.000 .1295 .3829 .9113 195.000 .1300644 210.0000042 .0077 225.0700963 .2758 240.0000946 .2172 270.0000946 .2172 270.0000946 .1590 .1319 .0376 300.0000519 .0452  ALFHA (2) =405 BETA (2) = .016 X/L .634 .742 .851 .986  HII .0000036 .0254								
300.0000689 .0462 330.00004890014  ALPHA (2) =444 BETA (1) = -3.997  X/L .634 .742 .851 .986  PHI .000006650224 .0234 60.000 .0092 .0142 .0173 .3191 120.0000 .1257 .2914 .5578 135.0000 .1321 .2407 .5776 150.0000 .1316 .3890 .6539 165.0000 .1257 .2914 .034 210.0000 .1257 .2914 .034 210.0000 .1259 .3829 .9013 195.0000 .1295 .3829 .9013 195.00000644 210.00000042 .0077 225.0700065 .2758 240.00000946 .2172 270.00000946 .2046		240.000		0128 .257	2			
ALPHA ( 2) =444 BETA ( 1) = -3.997  X/L	•	270.000 -	.07960735	0510 .496	54			
ALPHA ( 2) =444 BETA ( 1) = -3.997  X/L		300.000		0689 .046	5			
FHI		330 -000		- 0489 - 001	4			
FHI		•						
.000063024 .0234 60.00006630224 .0234 60.000 .0042 .0297 .0767 90.000 .0092 .0257 .2904 .5378 120.000 .1257 .2904 .5378 135.000 .1321 .2407 .5776 150.000 .1316 .3890 .6539 165.000 .1295 .3829 .9013 195.000042 .0077 225.000042 .0077 225.0000963 .2758 240.0000964 .2172 270.0000966 .2172 270.000096815501020 .3511 300.0000519 .0376 330.0000519 .0452  ALPHA (2) =405 BETA (2) = .016	ALPHA (2) = +.444 BETA (1) = -3.997	, X/L	.634 .742	.851 .986	i			
30.000	1	PHI						
60.000 .0042 .0297 .0767 90.000 .0092 .0042 .0173 .3191 120.0000 .1257 .2904 .5378 135.000 .1321 .2407 .5776 150.000 .1316 .3890 .6539 165.000 .1316 .3829 .5013 195.00001300644 210.0000042 .0077 225.07000963 .2758 240.0000946 .2172 2270.000090815501020 .3511 300.0001389 .0376 330.0000519 .0452  ALPHA (2) =405 BETA (2) = .016		.000		0029 .039	9			
90.000		30.000	0663	0224 .023	4			
120.000		60.000	.0942	.0297 .076	7			
135.000	•	90.000	.0092 .0042	.0173 .319	1			
150.000		120,000	.1257	-2904 -537	8			
165.000 .1295 .3829 .5013 195.0000644 210.0000042 .0077 225.0000963 .2758 240.0000966 .2172 270.000090815501020 .3511 300.0001389 .0376 330.0000519 .0452  ALPHA (2) =405 BETA (2) = .016		135.000	.1321	.2407 .577	6			
195.0000644 210.0000042 .0077 225.0700963 .2758 240.0000906 .2172 270.000090815501020 .3511 300.0001389 .0376 330.0000519 .0452 ALPHA (2) =405 BETA (2) = .016 X/L .634 .742 .851 .986 HHI .000 .0036 .0254 30.00014400382 .0482		1 50 .000	-1316	3890 653	9			
210.0000042 .0077 225.07000963 .2758 240.00000946 .2172 270.0000090815501020 .3511 300.00001389 .0376 330.00000519 .0452  ALPHA (2) =405 BETA (2) = .016		165.000	.1295	.3829 .531	3			
210.0000042 .0077 225.07000963 .2758 240.00000946 .2172 270.0000090815501020 .3511 300.00001389 .0376 330.00000519 .0452  ALPHA (2) =405 BETA (2) = .016	tana ara-daharan jarah dari dari dari dari dari dari dari dari							
225.070								
240.00009081501020 .3511 300.00015901389 .0376 330.0000519 .0452  ALPHA (2) =405 BETA (2) = .016		225.070		0963 .275	8			
270.000090815501020 .3511 300.0001389 .0376 330.0000519 .0452  ALPHA (2) =405 BETA (2) = .016				•				
300.0001389 .0376 330.0000519 .0452  ALPHA (2) =405 BETA (2) = .016			.09081550					
330.0000519 .0452  ALPHA (2) =405 BETA (2) = .016					•			
ALPHA (2) =405 BETA (2) = .016								
HI .(XX) .0036 .0254 30.00014400382 .0482		+ + + · · · · · · · · · · · · · · · · ·			-			
.0036 .0254 30.00014400382 .0482	ALPHA (2) =405 BETA (2) = .016		. 634 . 742	.851 .986				
30.00014400382 .0482		.000		.0036 .025	4			
			- 1440					
		60.000						

120.000

- :0153 .0850



# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT30)"

SECTION ( 1) EXTERNAL TANK	DEFENDENT VARIABLE	DEFENDENT VARIABLE CP				
ALPHA ( 2) =405 BETA ( 2) = .016	5 X/L .634	.742	.851	.986		
	FH T					
	135.000	0449	1 519	. 5600		
	150.000	0715	.2369	.4491		
	165.000	1062	.2217	2536		
•	195.000		.1418	.1538		
	210.000		.1659	.2352		
	225.000		.0550	. 4005		
	240.000		.0768	.3057		
		20728	0730	.4134		
	300.000		0607	.0697		
	330 .000 -		- 0339	-0353		
ALPHA (2) =360 BETA (3) = 4.03	X/L .634	.742	-851	.986		
	PHI					
	.000		.0016			
•	30 -000		0551	.0490		
	60.000		1506	.0287		
	90.000059		0799	.2757		
	120.000	-	0512	.2237		
	135,000		1639	.2377		
	150.000	2051	.0294	.1089		
	165.000	2898	0134	0316		
	195,000		3372			
	210,000		3563	.4081		
	225.000		.2739	.4575		
	240.000		.2485	.4212		
	270.000 .001	00033	0330	.2511		
	300 -000		.0283	.0667		
	330.000	•	0167	.0123		
ALPHA ( 3) = 3.819 BETA ( 1) = .00		.742	.851	.986		
	AHI .		2404	4 50 5		
	.000		.0194	.1595		
	30,000		0247	.1391		
•	60.000		0337	.0751		
	90.000 .000		0692	1753		
	120,000	0038	.1935	.4269		
•	135,000	0021	.0367	. 5524		
	1 50 .000	0220	.3085			
	165.000	0747	.2832	.2792		
	195.000		.2228	.2063		
	210.000		.2528	2909		
· · · · · · · · · · · · · · · · · · ·	225.000		.1944	. 4259		
	240.000		.1791	.3466		
	270.000013	Ø ÷.1019	1187	.1558		
•	300.000		0317	.0571		

-.0222 .1390

330.000

PAGE 1006

# ARC11-0141A19 OTS+STRUT SRB-OFF MFS-OFF EXT TANK

(REUT31) ( 22. CCT 74 )

# REFERENCE DATA

SREF =	0000 0000						*	ا , ا	ARAMETRI	CDATA		
	2690.0000 SQ.FT.	XMRP	=	976.0000	IN.	. XT	•					
	ream and IN.	YMRP	=	.0000				D_V-18 =	.000	ELV-OB	=	.000
SCALE =	1290 3000 IN.	ZMRP	= '	499.0000	IN.	ZT		RUDDER =	.000	MACH	=	900
	.0200					2 4		GIMBAL =	2.000			

#### SECTION ( 1) EXTERNAL TANK

SECTION ( 1) EXTERNAL TANK	DEPENDENT V	ARIABLE (	P		
ALPHA (1) = -4.020 BETA (1) = .00	e XVL	. 634	. 742	-851	.986
	-000			.0077	2741
	30.000		1127	0105	
•	en .ooo		0799		
	90.000	0417		.0085	
	120.000		.0037		.0284
	135,000				.2771
	150.000		.0132	.0915	1220
•	165,000		0148	.0514	~ 1011
en e	195.000			-0050	1654
	210.000		٠.	.0759	
	225.000		•		131 55 271 6
	249.000			0232	0015
	2701.000	0423	0387		1899
	300.000			0049	_
•	330,000			0126	1927
ALPHA (2) =288 BETA (1) = -4 007		·			3576
ALPHA (2) =288 BETA (1) = -4.003	X/L	. 634	.742	.851	000
	· PHI			•651	.986
	.000			13/20.7	
	30,000		0811	10087	2524
	60,000		0313		2624
	90,000	.0222		112112	1844
	120,000	·UEZE		0157	-1107
	135,000		.1149	1332	-1711
	1 50 .000		1286	.11729	·5136
	165,000		-1558	28 58	3866
	195.000		1085	.2397	.1254
•	210.000				2294
•	225.000				.0989
	240.000			.0772	-1545
	A 722	4.50		.0778 -	.0431
	300.000	-,1061 -	- 1010 -	-0256	.1561
			-	- 0230 -	-1803
	330.000				.2777
ALPHA (2) =279 BETA (2) = .009	V /1				
(10)		634	. 742	.851	.986
	EH1		. •		
	.000			0417 -	2318
	30.000	-			2375
	000,09		· .		1807
	90.000 <b>-</b> ,			mail and an	2077
	120.000				
		•		in State 1	10 <i>6</i> 0

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ARC11-014%A19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT31)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARIABLE CP			
ALPHA (2) =279 BETA (2) = .009	X/L .634 FHI	.742	.851	.986
	135.000	.0405	.0100	.3925
	150.000	.0409	.1511	.1566
	165.000	.0185	.1157	0728
	195.000	13.103	.0566	1110
	210.000		1288	.0356
	225.000		.0391	.3746
	240.000		.0370	.0897
	270.0000521	0279	.0000	.2251
	390.000			1639
	330.000			2558
	Journal		12/2/12	.2330
ALPHA ( 2) =264 BETA ( 3) = 4.031	X/L .634	.742	-851	.986
	FHI ·	•		
	.000		.0089	2478
	30 (000	1415		2518
	60.000	1332		1756
		1116		-2094
•	120.000	0913	0787	0581
	135.000	1122	0921	-1151
	1.52 (000)	1511	0423	0134
	165.000	2124	0678	2001
•	195.000		.2100	. 1372
	210.000		.2683	.1251
	225.000		.1270	.3798
	240.000		.1280	.1918
	270.000 .0164	.0403	0063	.1192
	300 (000		.0324	1748
	330.000		.0065	2739
ALPHA (3) = 3.978 BETA (1) = .000	X/L .634 FHI	.742	.851	.986
	<b>'000</b>		.0221	2360
	30,000	1425	0014	2540
•	60.000	1107	0162	1858
	90.0000518	17591	0892	-1042
	120.000	10437	.0726	.1294
	135.000	.0589	.0295	.4611
	1 50 - 000	.07640	.1750	.1780
	165.000	.0433	1361	0562
	195,000		.0931	1080
	210.000		1597	.0421
	225,000		.0731	4025
	240.000		.0722	.0844
· b	270.0000534	0761	0927	.1032
	300,000		0101	1739
•				



CATE 01 MAY 75 TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

ARC11-014IA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK (REUT31)

SECTION ( 1) EXTERNAL TANK

DEFENDENT VARIABLE CP.

ALPHA (3) = 3.978 BETA (1) = .000 X/L .634 .742 .851 .986 PHI 330.000 -.0018 -.2686

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ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT32) ( 22 OCT 74 )

PARAMETRIC DATA

### REFERENCE DATA

.000 ELV-08 = .000 ELV-18 = SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT .000 MACH = 1.100 RUDDER = LREF = 1290.3000 IN. YMRP = .00000 IN. YT BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT GIMBAL = 2.000

SCALE = .0200

SECTION ( 1) EXTERNAL TANK	DEPENDENT VA	RIABLE CP			
ALPHA ( 1) = -3.906 BETA ( 1) = .000	X/L PHI	. 634	.742	.851	.986
	.000			.2193	0004
	39.000		.0291	.2095	.0325
	60.000		.0522	-2075	.1492
	90.000	0966	.0676	.2004	.3985
	120,000		.0727	.1612	.1139
	135.000		.0753	.1646	.3317
	150.000		.0718	.2374	.2754
	165,000		.0259	2068	.0549
	195,000			.1655	.0156
	210.000			.2043	.1258
	225,000			.1661	.3167
	240.000			.1652	.0804
	270.000	0745	.0684	.1965	.3199
	300,000			.2094	.1470
	330.000			.2076	.0183
ALFHA (2) =255 BETA (1) = -4.000	X/L	. 634	. 742	.851	.986
	THI				
	.000		-	.2094	.0244
	30.000		0154	2105	.0210
	60.000		.0639	.2303	.0640
	90.000	.0860	.1697	.2492	2695
	120,000		.2294	.3166	3511
	135,000		.2493	.2916	.6292
	150.000		.2580	.4394	. 5429
	165.000		.2002	4084	.3357
	195,000			.0143	1124
	219.000			.0149	0058
	225.000			.0395	.2348
	249.009			.!7415	.0290
	270.000	1276	.0253	.1425	.1894
	300.000			.1636	.1175
	330,000			.1937	.0287
ALPHA (2) =213 BETA (2) = .009	X/L	634	742	.851	.986
	PHI		1		
	.000			.1975	.0267
	30.000		0207	.1881	
	60.000		.0102	.1928	.0512
	000.00	0615	.0 59 5	21.71	.2458
	120,000		.0918	2116	.2452
	150 ((00)		171210	2110	



# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT32)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAI	RIABLE CF	;		
ALFHA (2) =213 BETA (2) = .009	X/L	634	.742	.851	.986
	<del>PH</del> I.				
	135,000		.0852	.2065	. 4348
	150.000		.0766	.2912	.3241
	165,000		.0366	2552	11995
	195.000	,		-2109	.0723
	210.000			.2481	.1839
	225,000			-2059	4192
	240,000			.2068	.1956
	270.000	0541	.0655	-2023	• 2500
	300.000			-1889	.0709
	330,000		•	.1883	.0296
ALFHA (2) =219 BETA (3) = 4.828	X/L	. 634	.742	.851	.986
	PHI.				
	.000			1988	.0321
	30,000		.0692	.1813	.0469
	60.000		.0610	.1387	.1203
	90.000	1190	0048	.1031	.2221
	120.000		0250	0134	.0114
	135,000		0676	0643	2408
	150,000		1147	0783	0005
	165.000		1327	0775	1148
	195.000			.3732	.3130
	210,000			4102	3195
	225.000			-3111	.4961
	240.000			-3116	.2827
	270.000	.0935	.1657	2356	.2768
	300 .000			.2305	.0704
	330 .000		. •	-2048	.0075
ALPHA (3) = 3.981 BETA (1) = .000	X/L PHI	634	.742	.851	.986
	.000			.1833	.0355
	30,000		.0028	.1746	.0254
	ed .000		.0440	.1740	.0380
	90.000	.0247	.0937	.1696	.2794
	120,000		1 550	2878	.3128
	135.000		.1679	-2818	.4711
	150.000		.1611	.3496	.3477
	165.000		1348	-3195	1308
	195.000			2728	1219
	210.000		•	3093	.2125
	225.000			2722	.3794
	240.000			2743	.2374
	270.000	.0276	.0879	.1391	2692
	300.000			.1651	.0478

1.

DATE O1 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT32)

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

ALFHA (3) = 3.981 BETA (1) = .000 X/L ..634 .742 .851 .98

PHT ;

330.000 .1648 .0116



DATE DI MAY 75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1013

1.250

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT33) ( 22 OCT 74 )

ELV-CB =

### REFERENCE DATA

#### FARAMETRIC DATA

	# ·	2690.0000 1290.3000 1290.3000	IN.	XMRP YMRP ZMRP	=	.0000	IN. XT IN. YT IN. ZT		•			ELV-IB = RUDDER = GIMBAL =	.000 .000 .000
•			1 -										
SECTI	ION	(1)EXTER	NAL TANK			CEP	ENDENT VA	RIABLE CP	3				
ALPHA	( 1	1) = -4.04	4 BETA	(1) =	: .003		X/L PHI	. 634	.742	.851	.986		
							.000			.0077	.0717		
							30,000		1902	0348	.0776		
							. 60.000			0396	.0452		
							90.000	-,0566		.0164	.2670		
							120,000			0057	.2951		
					•		135,000			1492	.4732		
					•		150,000		0640	1864	.3604		
							165.000		1989	.1695			
		•					195.000			.0866	.0494		
							210,000			1303	.1497		
•							225,000			0517	.3583		
•							240.000	. 0007		0291	.55/16	•	
							270 .000 300 .000	- 1100 I	0891	.0007	.2784		*
							330,000			0388	.0504 .0733		•
							3301.000				.0133		
ALPHA		10	e BETA	(4) -	- 4 (202)		V 21	67.4					
		.,	DC1A		4 (LR.E.)		X/L FHÍ .	- 634	.742	.851	.986		
	•		O DEIA		LERI		PHI	- 634	. 142				
			o bein	1 44 =			FH1 -000	. 634		1704	1035		
			DETA	` • • ·	-4.000		.000 30.000	•634	0909	.1704 .2060	.1035		
				` • • ·	CRRI		941 000 30 .000 60 .000	.0374	0909 0208	.1704 .2060 .1993	.1035 .0926 .1298		
				` • · · ·	(REC)		90 .000		0909 0208 .0006	.1704 .2060 .1993 .0934	.1035 .0926 .1298 .3054		
							90,000 90,000 90,000 120,000		0909 0208 .0006 .0846	.1704 .2060 .1993 .0934 .3278	.1035 .0926 .1298 .3054		
							90.000 120.000 120.000 120.000		0909 0208 .0006 .0846 .0953	.1704 .2060 .1993 .0934 .3278 .2770	.1035 .0926 .1298 .3054 .4962 .6515		
							90,000 90,000 90,000 120,000		0909 0208 .0006 .0846	.1704 .2060 .1993 .0934 .3278 .2770	.1035 .0926 .1298 .3054 .4962 .6515		
							FHI .000 30.000 80.000 90.000 120.000 135.000 150.000		0909 0208 .0006 .0846 .0953	.1704 .2060 .1993 .0934 .3278 .2770	.1035 .0926 .1298 .3054 .4962 .6515		
							PHI .000 30.000 60.000 90.000 120.000 135.000 190.000 165.000		0909 0208 .0006 .0846 .0953	.1704 .2060 .1993 .0934 .3278 .2770 .4388	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106		
							FHI .000 30,000 60,000 90,000 120,000 135,000 150,000 165,000		0909 0208 .0006 .0846 .0953	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004		
							FHI .000 30,000 60,000 90,000 120,000 135,000 150,000 165,000 195,000 210,000		0909 0208 .0006 .0846 .0953	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106		
							PHI .000 30,000 60,000 90,000 120,000 135,000 165,000 195,000 210,000 225,000	.0374	0909 0208 .0006 .0846 .0953	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 .0006 0770 1315	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793		
							FHI000 30000 60000 90000 120000 135000 150000 165000 210000 225000 240000	.0374	0909 0208 .0006 .0846 .0953 .0975	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 .0006 0770 1315	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793 .1757		
							FHI000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 210.000 225.000 240.000 270.000	.0374	0909 0208 .0006 .0846 .0953 .0975	.1704 .2060 .1993 .0934 .3278 .2770 .4388 0160 0106 0770 1315 0244	.1035 .0926 .1298 .3054 .4962 .6515 .6014 -1004 0142 .2793 .1757		
							FHI000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 210.000 225.000 240.000 270.000 300.000	.0374	0909 0208 .0006 .0846 .0953 .0975	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 0700 0770 1315 0244	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793 .1757 .4042 .0834		
ALPHA		) =16		(2) =			FHI000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 210.000 225.000 240.000 270.000 300.000	.0374	0909 0208 .0006 .0846 .0953 .0975	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 0770 1315 0244 .0618 .1483	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793 .1757 .4042 .0834		
ALPHA							FHI000 30.000 60.000 90.000 120.000 135.000 195.000 210.000 225.000 240.000 270.000 330.000	1324	0909 0208 .0006 .0846 .0953 .0975 .0167	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 .0006 0770 1315 0244 .0618 .1483	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793 .1757 .4042 .0834 .0995		
ALPHA							FHI000 30.000 60.000 90.000 120.000 135.000 195.000 210.000 225.000 240.000 270.000 330.000  X/L FHI000	1324	0909 0208 .0006 .0846 .0953 .0975 .0167	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 .0006 0770 1315 0244 .0618 .1483	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793 .1757 .4042 .0834 .0995		
ALPHA							FHI000 30.000 60.000 90.000 120.000 135.000 195.000 210.000 225.000 240.000 270.000 330.000	1324	0909 0208 .0006 .0846 .0953 .0975 .0167 2194	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 .0006 0770 1315 0244 .0618 .1483 .851	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793 .1757 .4042 .0834 .0995		
ALPHA							FHI000 30.000 60.000 90.000 120.000 135.000 195.000 210.000 225.000 225.000 230.000 300.000  X/L FHI000 30.000	1324	0909 0208 .0006 .0846 .0953 .0975 .0167 2194	.1704 .2060 .1993 .0934 .3278 .2770 .4388 .4206 0160 .0006 0770 1315 0244 .0618 .1483	.1035 .0926 .1298 .3054 .4962 .6515 .6014 .4106 1004 0142 .2793 .1757 .4042 .0834 .0995		

120,000

(REUT33)

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALFHA (2) = ~.162 BETA (2) = .009	X/L FHI	. 634	.742	.851	-986
	135.000		0549	.0660	. 5293
	1 50 .000		0458	.2603	-4035
	165.000		1754	2359	.2002
	195.000			.1588	.1087
	210.000			.1954	.2117
	225.000			.1134	.4179
	240.000			.1077	.2743
	270.000	0820	1067	.0020	.4475
	300.000			.0658	1095
	339.000			.1166	0926
ALPHA (2) =210 BETA (3) = 4.031	X/L PHI	. 634	.742	.851	:986
				4.004	4/27/2
	.000			1651	.1030
	30.000		5605	.1477	.0999
	60.000		2110	.0631	-0803
	90 .000	1065		0399	.3638
	120.000		2161	1493	.1775
	135.000			1950	.2277
	150.000		1488	0390	.0452
	165.000	•	1654	0760	0999
	195,000			.3614	.3844
	210,000			.3814	.3662
	225.000			.3010	. 5700
	240.000		_	.2767	41729
	270.000	.0298	.0086	.0831	,3157
	300 (000)			-2070	-1145
	330.000	•		1957	.0778
ALPHA (3) = 3.846 BETA (1) = .003	X/L FHI	-634	.742	.851	.986
	.000			.2523	-1071
	30,000		1818.	.2304	.0883
	60.000		1110	.1987	1224
	90,000	0317	1275	.0786	3058
	120,000		0398	.2665	.3751
	135.000		0218	.2573	.4977
	1.50 .000		0585	-3326	. 42019
	165,000		1495	.3004	.2188
	195,000			-2435	.1528
	210.000			.2809	2538
	225.000			2453	4936
	240.000			.2410	.2914
	270 .000	0559	1194	.0433	3197
	300 .000			1993	1119





DATE DI MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1015

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT33)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA (3) = 3.846 BETA (1) = .003 X/L

.634 .742 .851

PHI

330 .000 .2252 .0775

1.400

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT34) ( 22 CCT 74 )

# REFERENCE DATA

PARAMETRIC DATA

LREF = 1290.3000 IN. YMRP =	.0000 IN. XT .0000 IN. YT .0000 IN. ZT			ELV-IB = RUDDER = GIMBAL =	.000 .000 .000	ELV-CB : MACH :
SECTION ( 1) EXTERNAL TANK	DEPENDENT VARI	ABLE CP			-	
ALFHA (1) = -3.981 BETA (1) = .000	X/L	.634 .742	.851 .986			
The state of the s	HII.	.004 .142	1031 1300			
	.000		0012 .0104	ı		
	30.000	1431	- 0471 - 0098			
	60.000		0713 .0453			•
		02260554				
	120,000 .		0066 .3241			
	135.000		1989 .4851			
	1 50 .000	1162	.1818 .3945			
	165,000	1226	.1576 .2039			
	195,000	•	.0833 .0901			
	210.000		.1067 .1812			
	225,000	•	0524 .3595			
	240.000		0136 .2601			
	270 .000 -	07650697	0516 .4982		,	
	300.000		0691 .0498			
	330.000		0465 .0019			
ALPHA (2) =231 BETA (1) = -4.000	. X/L	.634 .742	.851 .986			
	HI					
	.000		0017 .0401			
	30.000	0683	0179 .0219			
	60.000	.0032	.0323 .0719			
	90 .000	.0097 .0030	.0140 .3087			
	120.000	.1256	.2896 .5387			
	135,000	.1323	.2459 .5828			•
	1 50 .000	1341	.3939 .6518			
	165.000	.1290	3840 4983			
	195,000		01250676			
	210.000		0115 .0042			
	225.000		0947 .2778			
	240.000	130136 4 8 8 4	0923 .2195			
		.09091551	1054 3493			•
	300.000		1401 .0376			
	330.000		0541 .0430			
ALFHA (2) =231 BETA (2) = .009	X/L	.634 .742	851 986			
	THI.	• .			•	
	.000	.*	.0053 .0274			
	30.000		0385 .0463			
	60.000		0580 .0655			
		.01920628	0305 .3670			
	120.000	01 58	.0811 .4033			



ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

(REUT34)

						ARC11-	DIMINIS CO.		(D C- 1.		
SECTI	ON ( 1	EXTERN	AL TANK			0E	PENDENT VAR	IABLE CP			
ALPHA	(5) =	231	BETA	( 5)	= .0	09	X/L PHI	. 634	. 742	.851	.986
							135.000		0432	1565	.5591
		•				٠.	1 50 .000		0736	.2378	.4390
							165,000		1022	.2158	.2467
		•		•			195,000		******	.1414	-1503
							210,000			.1676	.2388
							225.000			.0563	.4030
							240.000			.0571	3091
							270 .000	-:0911	0732		.3947
			•				300,000	141,041,4	******	0614	.0684
							330,000			0332	.0331
			•				33011000			11.002	
ALPHA	( 5) =	210	BETA	( 3)	= 4.0	28	X/L	. 634	.742	.851	.986
							PHI				.0407
•				100			.000			0006	
				•			.30.000			0597	
1							60.000		1574		.0266
							90.000	0635	1611		.2696
			•	•			120.000			0583	.2190
							135.000			1615	.2355
							1 50 .000		2096	.0205	.1037
							165.000		2928		0512
		•	100				195.000			.3333	4512
٠.							210.000				4039
							225.000			.2705	.4469
							240.000	40.0	-	.2427	.4181
							270.000	UN12	0071	0409	-2348
							300.000			.0241	.0591
. •	•						330 '000			0204	.0073
ALPHA	( 3) =	3.93	BETA	(1)	= .0	203	X/L PHI	634	.742	.851	986
							.000	•		.0146	.1523
							30,000		1556	0212	.1382
							60.000		0851	0337	.0689
					•		90.000	.0035	0867		1700
			•				120.000		0067	1880	.4211
			•				135,000		+.0022		. 5481
							150.000	•	0227	.2998	.4641
							165.000		0781	.2723	.2690
							195,000			2179	.2916
1							210.000			.2459	.2887
	٠.,		•				225,000			.1871	4209
		•					240.000			.1857	.3424
			7				270.000	_ 04.60	1018		.1459
							270,000	0159	-,1010	1637	.1432

300.000

•

CATE OL MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-D14 )

PAGE 1018

(REUT34)

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF EXT TANK

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CF

ALPHA ( 3) = 3.930 BETA ( 1) = .003

X/L .634 .742 .851 .986

PHI

330.000 -.0211 .1265

ار اگریک

.000 .900

22 OCT.74 )

							•	15511		70.0701 <i>/</i> 7						(0.5)(7)		
								ARCII-	014TA19 0	IS+SIRUI :	MIN-BRE	MIS-NUM	EXI IANK			(REUT	35) (	22
	•			REFE	RENCE DA	ATA:			•		•				F	ARAMETRIC	DATA	
		=	1290 1290	.0000 .3000 .3000	IN.	XMRP YMRP ZMRP	=	.000	0 IN. XT 0 IN. YT 0 IN. ZT		•			ELV-1B RUDDER GIMBAL	=	.000 .000 <b>2</b> .000	ELV-OB MACH	=
																	•	
	SECT	TON	(1)	EXTERI	NAL TANK			0E	PENCENT V	ARIABLE C	3			•	•			
	ALPHA	-(	1) =	-4.300	B BETA	(1)=	.00	19	X/L	634	.742	851	.986	•		•		
	•		•						PHI							•	*	
									-000	•		-0131	2595					
									<b>3</b> 0.000		1063	0044	2731					
		-							eo.ooo		0750	0048	1900		,		•	
									90.000	0445	0252	.0145	.1838					
									120.000		.0047	0281	.0049					
									135,000		.0149	0445	2674	•				
									1 50 - 000		.0161	.0885	.1162				•	
									165.000		0126	.0488	1307					
									195,000		•	.0041	1714					
	•		-						210.000			.0771	0210					
									225.000			0208	2654					
									240.000				0148					
			70						270,000	0435	0300	.0039	.1738					
		t + .			•				300.000	,			1838					
									330,000				2938	•				
										•								
	ALPHA	( }	2) =	390	BETA	(1) =	-4.00	0	X/L PHI	- 634	.742	.851	.986			•		
•									.000			.0073	2553			• .		
									30.000		0864	0035	2659					
									60.000		0360		- 2002					
									90.000	.0219	.0343	0134	.1136					
									120,000		1099	1307	.1647			* * *		
									135,000		.1245	1003	5194					
									150,000		.1511	2836	3780					
									165.000		1063	-2384	.1110					
			٠						195.000				2492	-				
									210.000			0434						
									225.000	•		0832						
									0.40 000				• • 5.12					

240.000

270 .000

300,000

ALPHA ( 2) = -.384 BETA ( 2) = .012

339,000 .-.0124 -.2803 X/L : .634 .742 .851 .986 HI .000 .0353 -.2396 30.000 -.1264 ·0190 -.2464 **60** .000 -.0917 .0105 -.1963 90.000 --.0548 --.0340 .0033 -2016 120.000 .0556 .0402 .0901

--1082 --0454

.-.0240 -.1866

-.1105 -.1038 -.0298 .1699

# ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM EXT TANK

(REUT35)

SECTION ( 1) EXTERNAL TANK	DEFENDENT VARIABLE CP					
ALPHA (2) =384 BETA (2) = .012	X/L FHI	. 634	. 742	.851	.986	
	135.000		.0329	.0047	.3826	
	150.000		.0329			
	165.000		.0097		1083	
	195.000		•	.0464	1326	
	210,000			-1214	.0260	
	225.000			.0307	.3692	
	240.000			0026	.0760	
	270.000	0564	0346	0020	.2228	
	300,000	•		.0119	1778	
	330.000			.0105	2638	
ALPHA (2) =345 BETA (3) = 4.025	X/L FHI	634	.742	.851	.986	
	.000			.0035	2539	
•	30.000		1495	0144	2591	
	60.000		1403	0390	1838	
	90.000	1116	1199	0324	.2104	
	120,000	•	1022	0937	0787	
	. 135,000		1257	1014	.1047	
	150,000		1634	0438	0389	
	165.000		2267	0757	-,2378	
	195,000			.1998	.1199	
	210.000			.2573	.1177	
	225,000			.1220	.3769	
: · · · · · · · · · · · · · · · · · · ·	249.000			.0861	.0914	
	270.000	.0109	.0303	0102	-1170	
	300 -000			.0281	1925	
	330.000			.0013	5850	
ALFHA ( 3) = 3.903 BETA ( 1) = .006	X/L FHI	-634	.742	851	.986	
	.000			.0113	2469	
	30,000		1541	0114	2657	
	60.000		1189	9248	- 2088	
	90.000	0552	0683	09.59	.0961	
	120,000		·0369	.0645	.1156	
	135,000		-0541	.0235	4523	
	150.000	•	.0583	-1680	.1615	
	165,000		.0371	.1248	0880	
	195:000			.0800	1345	
	210,000			1 539	.0247	
	225.000			.0661	.3937	
	240.000			.0261	0713	
	270 .000	~.0558	0857	1009	.11960	
	300.000			0178	- 2006	
	•					



DATE 01 MAY 75

TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM EXT TANK (REUT35)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALFHA ( 3) = 3.903 BETA ( 1) = .006 X/L .634 .742 .851 .986

FHI

-.0096 -.2827

330.000

FAGE 1021

# ARC11-014TA19 OTS+STRUT SRB-NON MPS-NOM EXT. TANK

(REUT36) ( 22 OCT 74 )

### REFERENCE DATA

PARAMETRIC DATA

	SREF LREF BREF SCALE		12	90.0000 5 90.3000 1 90.3000 1 00200	IN.	XMRP YMRP ZMRP	=	3.0000 IN. X .0000 IN. Y 1.0000 IN. Z	T -				ELV-18 = RUDDER = GIMBAL =	000. 000. 000.s	EL V-C	B = =	.000 1.100
	SECT	TON	(	1) EXTERN	AL TANK			DEFENDENT	VARIABLE (	P				٠.			•
	ALPHA		1)	= -4.008	BETA	(1) =	.003	X/L	. 634	.742	.851	.986					
								FH1	<b></b>			1343 46					
									00	20.40	-2224	0048					
								30.0		.0246	-2129	.0279					
								0.09		.0563	-2108	- 1521				OF POOR	
								90.0 120.0			1992	.4167				OF POOR QUALITY	ı
		•						135.0		1044	-1640 -1655	.1049 .3262				10 g	2
								150.0		1099	.2359	.2722				25	4
								165.0		.0637	.1977	.0497				品品	2
								195.0			.1733	-0110				ا مح	
								210.0			2173	.1216				ୂୟ	70
								225.0			1741	3084				L.	Z
								240.00			1479	.0801				F	
					•			270.00		.0652	.2000	·3411					
								300.00			-2133	.1544				, F	45
								330.08	00		-2103	.0145		*			
	ALFHA	( 2	?) :	342	BETA	(1) =	-4.000	X/L FHI	.634	.742	.851	.986					
								-00	30		.2046	.0192	•				
	4.7					•		30.00	7(7)	.0281	-2075	.0077					
								60.09	00	(1999	.2286	.0489					
								90.00	30 <b>-1007</b>	1920	.2361	.2688					•
								120.00	וגע	2 520	3276	.3607					
							•	135.00	00	2624	-3053	. 6385	_				
								150.00	. טכ	-28R)	.4531	.5367		į.			
								165.00	70	.2364	.4179	.3211					
								195.00	רא		.0414	0900					
•								210.00	, פר		.0653	.0202					
								225.00	10		.0556	.2495					
			•					240.00	10		.0535	.0260					
								270.00	100766	.0274	.1443	.2218					
		•						300,00	10		.1676	.1325					
								330.00	10		-1909	.0209			•		
											•	•					
. *	ALPHA		) =	318	BETA	(2) =	-012	X/L	. 634	. 742	.851	986			. :	•	
								.00	เด		.2282	.0348					
						•		30.00	ū ·	0292	.2187.	.0504					
					_			eo.co	מו	.0105	.2211	.0593					
								90.00	00593	.0753	2553	.2522					
								400.00									

.1254 .2363 .2329



PAGE 1023

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT36)

	And the second second				
SECTION ( 1) EXTERNAL TANK	DEFENDENT VAR	RTABLE CF			•
ALPHA ( 2) =316 BETA ( 2) = .01	2 X/L	. 634	.742	.851	.986
	PHI PHI				
	135.000		.1193	.2366	. 4316
	150.000		-1131	-3140	.3252
	165.000		.0728	.2810	.0983
	195,000			.2292	.0854
	210.000			.2719	.1949
	225.000	.'		.2397	.4182
	240.000			.2117	.1816
	270.000	0479	.0717	2366	.2832
	300.000			.2214	.1228
	330,000			2125	.0388
				-	
ALPHA (2) =417 BETA (3) = 4.03	1 X/L	634	.742	.851	.986
	.000			.1960	.0264
	30,000	•	.0252	.1865	.0404
	en.000		.0232	.1477	.1410
		~.0891	.0039	1118	.2443
	120.000	-,0091	0134	0037	.0098
	135.000		0134		2519
	• * · .				
	150.000	•	0989	0507	.0237
	165,000		1121		1020
	195.000 -			3839	3/181
	210.000			4219	.31 53
	225.000			3184	.4977
	240.000			.2974	.2822
	270.000	.1021	.1812	-2344	.2758
	300.000			-2317	.0650
	330,000			. 20144	0007
ALPHA ( 3) = 3.717 BETA ( 1) = .00		- 634	.742	.851	.986
	PH1				
	.000	• .		.1846	.0179
	30,000		0427	.1743	.0093
	60.000		.0194	.1702	.0232
	<b>90 (000</b> )	.0730	.1187	.1751	2522
	120,000		.1835	.2701	.2779
	135.000		1995	·2609	.4647
	1.50 .000		1966	:3379	.3331
	165.000		.1694.	• 30 50	.1071
	195.000			.2733	.0991
	210,000			-3145	.1883
	225.000		,	.2665	3628
	240.000	.*		.2471	.2060
	270.000	.0860	.1111	.1684	.2521
	300 000			47.6	1204

DATE 01 MAY 75 TABULATED SOURCE FRESSURE DATA - IA19 ( ARC 11-014 )

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK (REUT36)

SECTION ( 1) EXTERNAL TANK

DEFENDENT VARIABLE CP

ALPHA ( 3) = 3.717 BETA ( 1) = .000 X/L . .634 .742 .851 .986

PHI

330.000 .1740 -.0004



1.250

# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT37) ( 22 OCT 74 )

MACH =

### REFERENCE DATA

# PARAMETRIC DATA

			•						
	V. 60	0.76 0000	TN. YT					ELV-IB =	.000
SREF = 2690.0000 SQ.FT.	XMRP =	976.0000						RUCCER =	.000
LREF = 1290.3000 IN.	YMRP =,	.0000						GIMBAL =	
BREF = 1290.3000 IN.	ZMRP =	400.0000	IN. Z.				•	•	
SCALE # .0200			•						* -
		DEE	ENCENT VAI	DIABLE CE					
SECTION ( 1) EXTERNAL TANK		CEI	EMPENI AN	KINDEE CI.				•	
	(4) -	.006	X/L	. 634	.742	.851	.986		
ALPHA ( 1) = -4.149 BETA	` */ -		FHI						
•	•		.000			.0001	.0679		
			30.000		1931		.0730		
			000.00		1216		.0502	!	
		•	90.000	0615		.0146	.2541		•
	v.		120.000		0670		.2853	,	
			135.000		0680		.4622	<del>.</del>	
			150.000		-:0667	.1808	.3593	j ·	
			185.000		2017	1634	.1493	J	•
			195,000			.0828	.0456	;	
•			210.000			1280	.1442	· · ·	
			225.000			0559	.3520		
	•		240.000			0346	2113		
			270.000	- 0648	0916	.0001	.2683		
			300.000	- 1110-10		0491	.0550		
			330.000			0459	.0703		· ,
			, Journal of						•
mus ( a) - AAA BETA	1 11	4 003	X/L	. 634	.742	851	.986		
ALPHA ( 2) =414 BETA	(1)	e itais	TH!		• • • •			•	
			.000			.1758	.1057	,	
			30.000		0909		.11942		
			60.000		0208	.2060	.131		
			90.000	.0369	9000	.1052	.3184		•
			120.000	10309	.0863	.3303	. 495		
		•	135.000		11962	.2804	6472		
						.4374	6011		
			150.000		.0182	.4181	4099		· .
			165.000		121102	0133	0943		
			195,000	2		.0009	007		•
			210.000	. •		0734	.277		
			225.000	. *					-
			240.000			- 1335	.176		•
	. •		270,000	1300	2165	0186	.3879		
			300,000		. •	.0544	.085		
•	•		330,000			.1400	-102	5	
					•				
ALPHA ( 2) =459 BETA	( 2) =	.009	X/L	- 634	742	.851	.986		
	•	•	<del>M</del> I	•	. ,				
	•		.000			.1427	.087		
			30.000		1813	.1252	.102		
			eo . oo o		1179	.0716	.107		
			90,000	0510	1086	.0282	. 41 5		
· · · · · · · · · · · · · · · · · · ·							3.40		

120.000

# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT37)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	TABLE CP			
ALFHA (2) =459 BETA (2) = .009	X/L PHI	-634	.742	.851	.986
	135.000		0568	.0514	5321
	1 50 .000		0487	.2591	4957
	165,000		1775	.2382	.2019
	195.000			1 600	.1019
	210.000			.1957	.2139
	225.000			.1134	.4155
•	240.000			1094	.2732
	270.000	0633	1048	11/164	4553
	300+000			.0619	.1101
	339.090			.1207	.0935
	002.				
ALPHA (2) =468 BETA (3) = 4.028	X/L	. 634	.742	.851	.986
Martin , S. a. 1400 Brit. , A.	. PHI				
	.000			.1731	.1069
	30,000		2560	.1459	.1042
	. 601,000		2092	.0599	.0827
	90.000	1067	2403	0314	.3500
	120,000		2229	1365	.1783
	135.000		1540	1799	.2250
	150.000		1526	0394	.0499
	165.000		1623	0703	0930
	195.000			.3613	.3877
•	210.000			.3816	37/12
	225.000			-3/311	. 5022
	240.000		•	.2815	. 4016
	270,000	.0306	.0161	.0951	.3351
	300.000			.2059	.1223
	330 .000			5002	.0828
ALPHA ( 3) = 3.864 BETA ( 1) = .003	X/L	. 634	.742	.851	.986
	FH!				
	.000			.2514	.1013
	30,000		1829	.2265	.0828
	60,000		1140	.2009	.1236
	90,000	03 <del>69</del>	1304	.0794	.3101
	120,000		0435	.2645	.3752
	135,000		0218	.2581	.4972
	1 50 .000		0637	.3347	.4231
	165.000		1 551	-3015	.2167
	195,000			.2403	-1541
	210.009		•	.2744	.2550
	225.000			.2488	.4045
	240,000			.2323	.2911
	270.000	0618	1189		3280
	300.000			2012	.1125
		-			







DATE G1 HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 ).

PAGE 1027

ARC11-0141A19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT37)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

.000 1.400

ARC11-014TA19 OTS+STRUT SRB-NON MPS-NON EXT TANK

(REUT38) ( 22 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

LREF =	2 690 .0000 1290 .3000 1290 .3000	IN.	XMRP YMRP ZMRP	<b>=</b> 22	.0000	IN. XT IN. YT IN. ZT	•				ELV-IB = RUCCER = GIMBAL =	000. 000.	ELV-CB MACH	=
SECTION	( 1) EXTERN	UL TANK			DEF	ENCENT V	ARTABLE CP							
ALPHA (	1) = -4. <u>1</u> 55	BETA	( <b>1</b> ) =	.003		X/L	. 634	.742	.851	.986	•.			
						.000			0052	.0075			•	
						30.000		- 1454	0503	0083	•			
						60.000			0768	.0446		• .	•	
4	100					90.000		0577		.4783			•	
									0062	.3237				
			•		. *	120,000				.4864				
		•				135,000								
					. •	150,000		1195	.1822	.3989				
						165.000		1300	.1589 .0824	.2084				
						195,000								,
						210.000			.1073 0540	.1776				
						225,000		1.0						
						240.000		- 13 787.7	0149	-2539				•
					•	270,000		0703	= .0545 = .0606	.4926		•		
						300 .000 330 .000			0696 0497	0007				
						330 (66)			~.ti49 /	CEEE!				
ALPHA (	2) =387	BETA	(1) =	-4.000		X/L FHI	. 634	.742	.851	.986				
						.000			0026	.0412	•			
						30,000		0667	0209	.0251				
						60.000		.0037	.0322	.0766				
						901,000		.0058	.0162	-3155				
						120.000		.1266	2918	. 5363				
						135,000		.1332	.2350	. 5829				
						150.000		.1335	.3910	. 6538				
						165,000		.1282	-3820	. 4981				
			*			195,000			0116	0648				
						210.000			0048	.0072				
						225.000			0950	.2775				
						240.000			0943	.2202				
						270,000	0901	1546	1033	.3501		*		
						300.000			1421	.0383				
						330 .000			0550	.0431				
		•		•		,								
ALPHA (	2) =318	BETA	(5).5	.009		X/L PHI	. 634	.742	.851	.986				
					•	.000			.0019	.0267				
						30.000		1437	0402	.0469		-		
						60.000			0610	.0666	• •			
						90.000	0203		0288	.3864				
						120.000		0181	.0821	4037	•	•		



FAGE 1029

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK

(REUT38)

SECTION (1) EXTERNAL TANK DE	FENDENT VAI	KIABLE CF				
ALPHA ( 2) =318 BETA ( 2) = .009	X/L	. 634	.742	.851	.986	
	PHI			- 4577	5593	
	135.000		0444	1537		
	150.000		0745	.2375	4473	
	165.000		1035	.2191	.2477	
	195.000			1420	1457	
	210.000			.1656		
	225.000			.0551	.4018	
	240.000			.0727	•3K168	
	270.000	0505	0729	0732	.4086	
	300.000			0621	0690	
	330.000			0371	.0347	
ALPHA ( 2) =354 BETA ( 3) = 4.031	X/L	.634	.742	.851	.986	
	PHI					
	.000			0017	.0425	
	30.000		2087	0580	.0504	
	60,000		1476	1 501	.0274	
	90.000	0601	1566	0819	. 2697	
	120,000		1858	0537	.2235	
	135.000		1909	1621	-2355	
	150,000		2076	.0279	1099	
	165.000		- 2913	0168	0372	
	195.000			•3348	4546	
	210,000	•		. 3571	4049	
	225,000			.2732	.4493	
	240.000			.2447	.4191	
	270.000	0001	0031	0349	.2465	
	300.000			.9256	.0635	
	330,000		•	0177	.0140	
ALPHA ( 3) = 3.939 BETA ( 1) = .000	X/L PHI	. 634	742	.851	.986	•
	.000	•		.0233	.1631	
	30,000		1495	0180	.1424	
	60.000		0792	0298	.0769	
	90.000	.0096	0788	0678	.1766	
	120,000		.0005	.1989	.4397	
	135,000		10033	.0462	. 5544	
	150,000	·	0188	3101	.4742	
	165.000		0707	.2850	.2783	
	195,000			.2230	.2:166	
	210.000			.2546		
	225.000			-1952	4255	
	240.000		•	.1787	.3449	
	270.000	0126	0970		.1517	
	300.000			- 11293	.0556	

.

DATE 01 MAY 75 TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

ARC11-014IA19 OTS+STRUT SRB-NOM MPS-NOM EXT TANK (REUT38)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.939 BETA ( 1) = .000 X/L .634 .742 .851 .986 .

HI

330.000 -.0151 .1346



DATE OI MAY 75

# TABULATED SOURCE PRESSURE DATA - TAIS ( ARC 11-014 )

PAGE 1031

.000

.900

ARC11-014TA19 OTS SRB-OFF MPS-OFF EXT TANK

(REUT39) ( 22 OCT 74 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN.	XMRP = YMRP = ZMRP =	.0000	IN. YT					ELV-18 = RUDDER = GIMBAL =	.000. 000. 1000.	ELV-CB MACH	=
SCALE = .0200											
		OF P	COCOT UN	TAD: E CE						•	
SECTION ( 1) EXTERNAL TANK		DEH	ENCENT VAI	CIABLE CF				*			
ALPHA ( 1) = -8.139 BETA	(1) =	.000	X/L	. 634	.742	.851	.986				
ALTHA C 11 D DI133 DETA	, -		PHI		-					•	
en de la companya de La companya de la co			.000			0010	2788			•	
			30 .000		0988	0160	~.2870				
		•	en .000	•	0552	0239	1888	•			
	. •		90.000	0134	0164	0245	.2268				
			120,000		.0129	0750	.0073				
			135.000		.0275	0911	.2186	1			
			150.000		.0349	.0722	.0993	•		*	
			165.000		.0253	.0535	+.1062				
			195.000			.0485	1383				
			210,000			.0477	0686	·		•	•
			225,000			0564	.2047	,			
			240.000			0526	0193				
•			270.000	0234	0356	0306	.2400				
			300.000			0154	1710				
			330.000			0200	3076	;			
ALPHA ( 2) = -4.032 BETA	(1) =	.000	X/L	. 634	.742	.851	.986				-
			PHI	•							
	4.		.000			.0161	2652				
			30 ,000		1034	.0018	2693				
			60.000		0714	.0006	1898				10
			90.000	0429	0090	.0203	.1885				
			120.000	•	.0183	0104	.0199				
			135,000		.0338	0285	.2553				
			150,000		.0426	.1112	.1153		·		
•			165.000		.0366	.0797	0962				
			195.000			.0754	1208				
			210,000			.0778	0134				
		*	225.000			0001	.2754				
			240.000			.0005	.0179		•		
			270.000	0465	0222	.0055	-2118				
			300,000			.0045	1808				
		*	330.000		•		2918				
			,					•			
ALPHA ( 3) =228 BETA	(1) = -	4 (003	X/L PHI	.634	.742	.851	.986	•	• •		
			.000	•	•	.0157	2545	4 - 4			
		•	30.000		0890		2567	•	•		
			60.000		0410		1889				•
					7.77	2222					

120,000

.0429

.1991

.0911 .1503 .1723

ARCI1-014TA19 OTS

SRB-OFF MPS-OFF EXT TANK

(REUT39)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAL	RIABLE CF	•		
ALPHA (3) =228 BETA (1) = -4.003	X/L PHI	. 634	. 742	.851	.986
	135.000		.1084	.1684	5009
	150.000		.1225	.3127	.3703
	165.000		.0777	.3638	.1636
	195.000			.2261	0434
	210.000				1189
	225.000 .			0016	.0843
	240.000				0517
	270.000	- D044	0798		.2821
	300,000	0044	-,6190		1816
	330.000			0032	2776
	J.J. C.C.C.			*:::52	
ALFHA (3) = -,249 BETA (2) = .012	X/L PHI	. 634	.742	.851	.986
	.000			.0257	2583
	30,000		1187	.0110	2569
	60 .000		0846		1952
	90.000		0211	0094	.2094
	129,000		.0360	.0346	.1010
	135.000		.0523	0044	3585
	1 50 .000		.0666	.1425	.1314
	165,000		.0612	.1114	+.0768
	195,000			-1974	1032
	210,000			.1059	-0315
	225.000			.0404	.3547
	240.000			.0496	.0775
	270.000	0576	0304	0118	2155
	300.000			.0110	1760
	330 .000			0083	÷.2746
ALPHA ( 3) =261 BETA ( 3) = 4.028	X/L PHI	634	.742	851	.986
	.000			MAS	2643
	30,000		- (37)	0084	2706
	60,000			0309	1992
	90.000	0811		0914	.2689
	120:000				0687
	135,000			0369	.0835
	150.000		10090	.1101	.0033
	165.000		0205	.0280	0725
	195,000		0203	.2283	.1079
	210,000			2320	.1573
	225.000			.1817	.4021
	240,000			.1663	.0975
	= : ::	- 0304	DO 47		-
	270.000	0381	.0243	.0687	1042
	300,000			.0368	~.1793

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

	ARC11-014TA19	OTS SF	B-OFF	MPS-OFF E	XT TANK
SECTION ( 1) EXTERNAL TANK	DEPENDENT	VARTABLE CP			•
ALPHA (3) = +.261 BETA (3) = 4.0	28 X/L FHI	.634	.742	.851	.986
	330.00	ŋ		.0077	2821
ALPHA (4) = 4.032 BETA (1) = .0	O3 X/L RHI	. 634	.742	.851	.986
	.00			.0161	
	30.00	9 .	1572	0032	2526
	60.000	9	1090	0179	1958
	90.00	00533	0476	0925	.0870
	120.00	0	.0459	.0653	-1171
	135.00	n .	.0660	.0243	<b>4137</b>
in the state of th	150.000	D .	.0856	.1729	.1516
	165.00	ព	.0830	.1365	0660
•	195.00	ប្		.1259	~.0901
	210,000	o .		.1267	.0498
	225.00	ថ		.0802	-3918
	240.00	ព -		.0762	.0815
	270.00	00577	0669	0964	.1074
	300,000	9		0132	1681
	- 330 (00)	o .		0054	2675
		•	•		
ALPHA ( 5) 2 7.920 BETA ( 1) = 1.0	13 X/L	. 634	.742	.851	.986
	. PHI				
	.009	0		0001	~.2445
	30.000	ņ ·	1657	0197	2671
	60.000	ŋ.	1251	0440	2055
	90.000	00416	0693	1292	.0210
	120.00	0.	.0412	.0653	.0886
	135.000	o -	.0632	.0152	.4394
	150.000	ŋ	.0888	.1675	.1412
	165.000	o	.0852	.1281	0785
	195.000	n	•	.1272	0979
	210.000	n .		.1764	.0362
•	225.000	0		.0850	.3770
	240.009	מ	•	.0836	:0661
	270.009	00553	1982	1684	0082
	300.000	n		0364	1959
	330 00			-10405	- 0003

330,000

-10185 -.2803

PAGE 1033

(REUT39)

ARC11-014TA19 OTS

SRB-OFF MPS-OFF EXT TANK

(REUT40) ( 22 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

.000 .000 ELV-08 = ELV-18- = SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT 1,100 . .000 MACH = RUDDER = YMRP = .0000 IN. YT LREF = 1290.3000 IN. GIMBAL = 1.000ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. ..0200 SCALE =

SECTION ( STEXTFENAL TANK

### DEPENDENT VARIABLE CP

SECTION (	1) EXTERNA	L TANK				CEPENDENT V	ARTABLE CI-			
ALPHA ( 1)	= -7.992	BETA	(1)	=	.003	X/L	. 634	.742	.851	.986
nettin 1 er		= ·.				PHI				
						.000	3		.2267	0083
						30.000	1	0780	-2111	.0143
						60.000	)	0912	.2125	.1923
						90.000		0093	.1450	.4144
						120,000		.0277	.0984	-9761
						135.00		.0464	.0908	.2697
						1 50 .000		.0532	.2006	.2374
						1,65,000		.0447	.1674	.0361
					•	195.00			.1711	.0298
						210.000			.1790	.1115
						225,000			.1143	2908
						240.00			.0929	.0738
						270.00		0410	.1221	.4116
						300.00			.2236	.2162
						330.00			.2134	.0058
						3301.000	.,			
ALPHA ( 2)	= -4.080	BETA	(1)	=	.003	X/L PHI	. 634	.742	.851	.986
						.00	n.		.2339	.0085
								.0233	.2229	.0444
						30.00		.0393	.2193	.1530
						60.00			.2105	.3889
			•		•	90.00		.0617	.1744	
						120.00		.0864	.1676	
						135.00		.0993		.2543
4						1:50 .00		.0917	.2461	.0553
•						165.00		.0917	.2236 .2093	.0333
•						195.00				.1350
						210.00			20195	.135.1
	2.4					225.00			1851	
•						240.00			:1848	.0919
						270.00		.0546	.2105	
						300.00			.2217	
						330.00	i)		.2193	.0266
		DETA	· 		4 000	X/L	. 634	.742	.851	.986
ALPHA ( 3)	=225	BETA	(1)		4.000	PHI				
					•	.00	ın ·		.2127	. Π187
	•					30.00		0385	.2184	•
		100						.0341	.2404	.0912
						60.00		.1453	.2924	.31 57
					٠.	90.00		.2054	.3333	,3238
						120.00	itt.	.2004	دررد.	10230



PAGE 1035

(REUT40)

	ARC11-0141A19 OT	's s	SRB-OFF MPS-OFF EXT TANK			
SECTION ( 1) EXTERNAL TANK	DEPENDENT VA		٠			
ALFHA ( 3) =225 BETA ( 1) = -4.0	00 X/L PHI	. 634	.742	.851	.986	
	135.000		.2303	.3578	6199	
	1 50 .000		.2378	.4683	. 5439	
	165.000		.1846	. 51 70	.3717	
	195.000			.3829	-1171	
	210,000			.1298	.0382	
	225.000			.1678	2087	
	240.000			.1696	.0973	
	270.000	0578	.0827	.1759	-31 58	
	300.000			.1739	0359	
	330 -000			.1944	.0120	
		. •			•	
ALPHA ( 3) =159 BETA ( 2) = .0	12 X/L	634	.742	.851	.986	
	THI					
•	.000			-2180	-0241 -	
	30,000		0427	.2073	.0409	
	60.000		.0075	.2110	.0664	
	90.000	0245	.0992	.2448	.2525	
•	120,000		.1425	. 2304	.2173	
· .	135,900		.1541	.2277	.3970	
	150,000		.1607	.3097	.2887	
	165,000		.1548	.2774	.0926	
	195,000			.2645	.0919	
	210,000			.2647	.1797	
	225.000			.2281	.3992	
	249,000		•	.2281	.1761	
and the state of t	270.000	0092	.0984	.2306	.2759	
	300.000			-2104	.1133	

ORIGINAL' PAGE IS
OF POOR QUALITY

ALPHA ( 3) = -.312 BETA ( 3) = 4.028

. 634

330,000

X/L FHI

.000

30.000

.742

.2208 .0655 .2117

.851

-20134

.0277

.986

.0418

.0425

.0409

3550

.1197

.3028

60.000 .0889 .1991 90.000 .0983 2010 120.000 .1278 .1789 -1245 .1733

135,000 -2259 150.000 .1113 .2718 2523 .1698 165,000 .0613 .0175 195,000 .4036 3001 210,000 .4373 .3801 .5739

225.000 .3817 240.000 .3596 270.000 .0422 .1087 3044 300.000

.3270 -2521 . 1304

CATE O1 MAY 75 TABUL	TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )								
	ARC11-	0141A19 OTS	s	RB-OFF MI	-s-off e	XT TANK			
SECTION ( 1) EXTERNAL TANK	DE	EPENDENT VAR	TABLE CP		•				
ALPHA ( 3) =312 BETA ( 3) :	4.028	X/L. PHĪ	. 634	.742	.851	.986			
		330.000			-2306	.0311			
ALPHA ( 4) = 3.685 BETA ( 1) :	.000	X/L	634	. 742	851	.986			
		PHI							
		.000			.1784	.0112			
		30.000		0440	.1705	.0071			
		60.000		.0555	.1648	.0176			
		90.000	.0753	.1329	.1651	.2394			
		120.000		.1948		2696			
•		135.000			-2534	-4310			
		150.000		.2219					
		165.000		.2173	-3112	.1098			
		195,000			3054	.1222			
		210.000			31142	.1898			
		225.000			.2729	.3514			
		240,000			.2729	.2148			
		270.000	.0796	1190		.2382			
		300.000			1689	.0323			
		330,000			.1695	0034			
ALPHA ( 5) = 8.073 BETA ( 1) :	: .000	X/L FHI	.634	.742	.851	.986			
		.000			-1315	0061			
		30.000		0450	.1240	0230			
		60.000		.0149		0087			
		90.000	.1301	.1155	.0793	.1827			
		4.001 (2021)		1040	0577	23.513			

1238

120,000

135.000

150,000 165,000

195,000

210.000

225.000

240.000

270.000

300.000

330.000

.1942

.2130

.2257 .2276

1056

.2577

.2457

.3215

.2960

.3073

-3117

.2812

.0697

.1248

.1323 -.0285

(REUT40)

-2350

.3923

.2686

.0878

.1054

.1642

.3977

.1839

.1883 .0049



CATE O1 MAY 75

PAGE 1037

ARC11-014TA19 OTS

SRB-OFF MPS-OFF EXT TANK

(REUT41) ( 22 OCT 74 )

# REFERENCE DATA

# PARAMETRIC DATA

1,000

						• -		,		.*			
		2690.0	ann' s	^ ET	XMRP	=	976.0000	IN. XT					ET A-1B
					YMRP			IN. YT					RUCCER
		1290.3			ZMRP		400.0009	IN. ZT				-	GIMBAL
BREF		1290.3		N.	21111	-	40101 001010101						
SCALE	=		5()()									•	
SECT	ION	( 1)EX	TERN	L TANK			CEP	ENDENT VAR	TABLE CP	•		•	
~		1) = -8	030	DETA	(4)	n	me.	. X/L	. 634	.742	-851	.986	
ALITIA		1) = -0		DEIA	, .			PHI					•
								.000			0300	0044	
								30.000		2050	0661	-0034	4
								60.000		1283	0950	.1278	
								90.000	0499		.0069	.3/149	
								120.000	******	0472	0533	.1965	
								135-000		0531		3588	
								150.000		0333	.1646	.3100	
						*		165.000		0435	.1562	.1262	
								195.000	•		.1429	.0786	
											.1421	.0990	
					-			210.000			0378	.2918	
								225.000			0344	.1385	
		į. :						240.000	- 0679	1336		-3132	
								270.000	0012	1330	0826	.1615	
								300,000			0704	0009	
								330,000			••		
1								X/L	. 634	.742	.851	.986	
ALPH/	<b>A</b> (	2) = -	4.098	BETA	(-1)	=1	LRIG	PHI					
				•							.0265	.069	
								.000			0140	.0783	
			•					30.000				.0389	
								60.000			0255	.270	
			* .					90.000	11544	0924	.0255	.296	•
								120.000		0700	.0226		
					•			135,000			13977	.443(	
								150,000		0255	.21 52	,3486	
								165,000		0448	.2051	1 53	
	•							195.000	•		1806	.116	
				•		14.		210,000			1820	.143	
								225,000			.0370	.3399	
			4					240 1000			.0360	.234	
								270,000	0694	0975	.0172	.274	
								300.000			0296	.054	8
		• •						330.000			0283	.072	3
		• • •	_ ^.	BETA	( 43	= -4	000	X/L	. 634	.742	.851	.986	
ALPH	A . {	3) =	24:	DEIA	/		erwer	FH!		_			
			•					.000			.1834	.105	3
								- 30,000		1086		.097	
		• •							٠.	0459		.124	
								60.000	0200			.285	
		-						90.000	.0388	0115		E16	

120,000

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ORIGINAL PROBLEM.

ARC11-014TA19 OTS SRB-OFF MFS-OFF EXT TANK

(REUT41)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARI	ABLE CP			
ALPHA (3) =243 BETA (1) = -4.000	X/L	. 634	.742	.851	.986
	PH I		0070	.3584	.7775
	135.000		0238	.4880	6438
	1 50 .000		.0524		. 4734
	165,000	•	.0378	. 5348	.1581
	195.000			.3440	.0220
	210.000			.1006	
	225.000	,		.0964	.1655
	240.000			0979	.1468
	270,000	1388	1326	0531	.3641
	300.000			.0900	1015
	330,000			.1799	.1008
ALPHA ( 3) =171 BETA ( 2) = .012	X/L PHI	. 634	.742	.851	.986
	<b>.000</b> ,			.1722	.0874
	30.000		1893	.1709	1000
	60.000		1198	.0979	.1060
	90.000	0523	0912	.0264	.3946
	120,000		0757	.1573	.3349
	135,000		0477	.1122	.4687
	1 50 .000		0070	.2933	.3892
	165,000		0178	.2736	.2024
	195.000			.2435	.1638
	210.000			.2496	.2042
	225.000			.1657	.3843
	240.000			.1613	.2763
	270,000	0726	105)	9000	. 4259
	300,000	117.20		,0679	.1099
	330 (000			.1380	.0951
	3301000				
ALPHA (3) =171 BETA (3) = 4.025	X/L	. 634	.742	8 51	.986
	PHI (2002)			.1782	1028
	.000		2674	.1785	11974
	30,000		1964	.0823	1035
	60.000	1405		0878	4295
	90.000	1195	1328 0776	.0651	1369
•	120.000			.0579	.2253
	135.000		0643		.2252
	150.000		0419	1895	.0424
	165.000		0593	.1059	
	195,000		* *	.3699	.3713
	210,000			.3723	. 4659
	225,000			.3659	6659
and the second of the second of the second	240.000			.3527	.4678
	270.000	.0166	0263	1801	.3139
	300,000			.1974	.1187

DATE DI MAY 75

SRB-OFF MPS-OFF EXT TANK ARC11-014TA19 OTS

(REUT41) ( 22 OCT 74 )

 DATA		

976.0000 IN. XT SREF = 2690.0000 SQ.FT. .0000 IN. YT YMRP = LREF = 1290,3000 IN. 400.0000 TN. ZT ZMRP = BREF = 1290.3000 IN. .0200 SCALE =

PARAMETRIC DATA

ELV-OB = .000 ELV-18 = 1.250 MACH = RUDDER = 1.000 GIMBAL =

SECTION ( 1) EXTERNAL TANK

CEPENDENT VARIABLE CP

ALPHA (1) = -8.232 BETA (1) =006	X/L	634	.742	.851	.986
	THI			0300	0044
	.000		2050		.0034
	30,000		1283	0950	.1278
	60.000	(1499	1076	.0069	.3/149
	90.000	(1499	0472	0533	.1965
	120.000		0531	1590	.3588
	135,000		0333	1646	.3100
	150.000		0435	.1562	.1262
	165.000		-,0433	.1429	.0786
	195.000			.1421	.0990
	210.000			0378	.2918
	225.000			0344	.1385
	240.000	0.070	1336		.3132
	270.000	0672	1330	0826	.1615
	300.000			0704	0009
	330.000	•			
	X/L	. 634	.742	.851	.986
ALPHA ( 2) = -4.098 BETA ( 1) =006	A €				

301.000	•		- 12/12/4	
X/L	634	.742	.851	.986
FHI				.0695
.000		4	.0265	
30.000		1913	0140	.0783
60.000		1179	0265	.0385
90.000	0544	0924	.0255	.2704
20.000		0700	.0226	.2967
35.000		0536	0977	.4436
50.000		0255	.21 52	.3488
65.000		0448	.2051	.1530
		,	.1896	.1162
195.000			1820	.1435
210 .009			.0370	.3399
225.000			.0360	.2344
240 1000		2075		.2742
570 (000	0694	0975		.0548
<b>3</b> 00 <b>.</b> 000			0296	.0720
330 .000			0283	.0120
	•			
X/L	. 634	.742	.851	.986
FHI				
נועו			.1834	.1053

ALPHA ( 3) = -.243 BETA ( 1) = -4.000

.1834 "ເນີເນີເນີ .0978 .2912 30.000 .1240 .2003 60.000 .2858 .0388 -.0115 .1803 90.000 .3355 120.000

ARC11-014TA19 OTS SRB-OFF MPS-OFF EXT TANK

(REUT41)

		, ARC	i ultimis ell					
SECTION ( 1) EXTERNAL TANK	**************************************							
ALPHA ( 3) =243 BETA	(1) =	-4.000		. 634	.742	.851	.986	
			,		0238	3584	.7775	
•			•			.4880	. 6438	
				•		. 5348	.4734	
						.3440	.1581	
					•	.1006	.0220	
	• .					.0964	.1655	
						.0979	.1468	
				1388	1326	0531	.3641	
		•				.0900	.1015	
						.1799	.1008	
			002.76.54			•	• .	
- A DETA	( 2) -	nto	X/1	. 634	.742	.851	.986	
ALPHA ( 3) =171 BETA	( 2) -	17112						
						.1722	.0874	
					1893	.1709	.1999	
			-		1198	.0979	.1060	
				0523	0512	.0264	.3946	
	*				0757	.1573	.3349	
					0477	.1122	.4687	
			150.000		0070	.2933	.3892	
			= =		0178	.2736	.2024	
						.2435	.1638	
						.2406	2.142	
						.1657	.3843	
						.1613	.2763	
				0726	1050	.0006	, 4259	
			- ·			.0679	.1099	
						.1380	.0951	
			33.71					
ALPHA ( 3) =171 BETA	( 3):	= 4.025		. 634	.742	.851	.986	
			.000			.1782	.1028	
		* .			2674	.1785	.0974	
					1964	.0823	1035	
				1195	1328	0878	.4295	
			•			.0651	.1369	
					0543	.0579	.2253	
						.1895	.2252	
						.10 59	.0424	
					· · ·	.3699	.3703	
					17.00		.4659	
			•					
				,nies	0263			
	'		Other state					

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

							AR	C11-014TA19	o <b>ts</b>	SRB-OFF M	PS-OFF EX	T TANK	
SECTI	ion (	1)!	EXTERN	L TANK				DEPENDENT	VARIABLE (	F			
ALPHA	( <b>3</b> )	=	171	BETA		3) =	4.025	X/L	. 634	.742	.851	.986	
			. •					FHI 330.00	o		.1923	.0868	
ALPHA	( 4)	=	7.8 <del>6</del> 0	BETA	ť	1) =	003	X/L	.634	.742	.851	.986	
AC, 7111						-		PHI					
								.00	o i		.2498	.0952	
								30.00		0831	.2092	.0674	
								60.00		0199	.1777	.0655	
								90.00		.0150	.0149	.1641	
								120.00		.1172	.3238	.3423	
						٠.		135.00		-1365	.3210	.4598	
				4. T				150.00		.1529	3938	.4052	
				•				165.00		.1656	.3675	.2395	
								195.00			.3392	.2096	
								210.00			.3368	.2457	
				• ;				225.00			3091	.3420	
			•					240.00			3096	.2638	
								270.00		0180	.0362	.1856	
								300.00			.1912	.0658	
								330.00			2135	10613	
								2201100	r_1				

(REUT41)

ARC11-014TA19 OTS SRB-OFF MPS-OFF EXT TANK (REUT42) ( 22 OCT 74 )

#### REFERENCE DATA

SREF = 2690,0000 SQ.FT. XMRP = 976,0000 IN. XT LREF = 1290.3000 IN. YMRF = .0000 IN. YT ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

.000 ELV-CB = ELV-IB = = HOAM 0000. RUDDER = 1.000 GIMBAL =

PARAMETRIC DATA

SCALE = .0200

#### SECTION ( 1) EXTERNAL TANK

#### DEPENDENT VARIABLE CP

ALPHA ( 1) = -4.059 BETA ( 1) = .000	X/L	. 634	.742	.851	.986
	TH!				
	.000			0007	.0087
	30.000		1407	0410	.0129
	eo.ooo		0737	0625	.0466
	90.000	0154	0558	0130	.4636
	120,000		0842	.0504	.3476
	135,000		0907	1056	. 577)4
	150,000		1943	.2367	.4177
	165.000		1280	.2305	.2444
	195,000			.1898	.1935
	210.000			.1840	2002
	225.000			.0895	.3396
	240.000			.0584	.2782
	270.000	0765	0839	0100	.4651
	300.000			0560	.0504
	330.000			0424	.0034
	2021.11.10				
ALPHA (2) =183 BETA (1) = -3.997	X/L	. 634	.742	.851	.985
ALPHA ( 2) =183 BETA ( 1) = -3.997	FHI	****			
	.000			.0010	.0547
	30.000		0683	0244	.0390
	60 1000		0066	.0294	.0839
	90.000	.0149	.0031	.0906	.2691
	120.000		0203	2332	. 5989
	135,000		0025	.1979	.7526
	150,000		0094	.4316	.6757
	165.000		.0505	4888	. 5363
	195.000		12,32,3	.2945	.2361
	210.000			.0838	.0682
	225.000			.1102	.1929
	240.000		•	.0838	2057
	_	0896	1129	1193	2357
•	270.000	0090	-11129	1123	.0564
	300.000			0380	.0504
	330.000			- 111500	151 3413
			740	.851	.986
ALPHA ( 2) =195 BETA ( 2) = .012	X/L	. 634	. 742	.0.21	1.500
	i <del>H</del> i			000	0777
	רוניון.			.0021	.0333
	30.000			0315	.0485
	eo .ooo		0767		.0612
	90.000	0204		0127	.3295
	120,000		0414	.1517	.4224
	•				

AR.	C11-014TA19 OTS	s SF	RB-CFF MI	%-OFF EX	T TANK
SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	TABLE CP	•."		
ALPHA (2) =195 BETA (2) = .012	X/L PHI	. 634	.742	.851	.986
	135.000		0532	0391	.5413
	150,000		0804	.3037	.4643
	165.000		0845	.2954	.2786
	195.000		72.2	.2521	.2445
	210.000			.2534	2500
	225.000			.1777	3830
	240.000			.1572	.31 58
	270.000	0576	0748		.3611
•	300.000			0474	.0672
	330.000			0281	.0393
ALPHA ( 2) = .027 BETA ( 3) = 4.028	Χ/L	. 634	.742	.851	.986
	FHI			-0011	.0597
			- 2006	0305	.0564
	30.000			1208	.0572
	60.000	- 13500	1055		.2554
	90.000	0599	0950	.1032	.2016
	120,000			.1068	.2619
	135,000		1355		.2606
	150,000		1815	1489	.1440
	165,000 195,000		1015	.3020	.4102
	210.000			.3382	.4703
	225.000			.2779	61 30
	240.000			1580	. 5121
		0004	- 0187	.0515	.2746
	300,000	1(1114		.0235	.0900
	330.000			0242	.0305
and the second s	330.000			****	11,31,3
ALPHA (3) = 3.924 BETA (1) = .003	X/L FHI	. 634	.742	.851	986
	.000	,		.0257	.1543
	30.000		- 1515	0100	.1420
	60.000	•			.0583
	90,000	.nn⊿7	0644		1821
	120.000		0141	.2393	.4309
	135.000		-:0063		.5286
	150.000		0190		.4846
	165,000		.0200		3056
	T. 44		11121111	.3261	.3003
	195,000			.3247	.3035
	210.000			2514	:3974
	225,000				.3452
•	240.000		(80=-	.2501	
	000.075	0182	0831		.149!]
	300.000			0229	.0509

1000			OTC.
ARCS	1-01	41A19	פועי ו

SRB-OFF MPS-OFF EXT TANK

(REUT42)

SECTION ( 1) EXTERNAL TANK		DEPENDENT VARI	IABLE CP				
ALFHA (3) = 3.924 BETA (1) = .0	003	X/L PHI	. 634	. 742	.851	.986	
		330.000			0095	.1398	
			<b></b> .	7.0	.851	.986	
ALPHA (4) = 7.809 BETA (1) =	203	X/L	. 634	.742	.831	. 30 0	
		l <del>H</del> Ι					
		.000			. 5358	.1919	
		30.000		1362	.2074	.1508	
		0.000		0712	.0975	.1148	
		90.000	.0504	0108	1158	.1175	
		120,000		.0574	.2928	.3750	
		135.000		0800	.2841	.4860	
		150.000		.0921	.4008	4513	
		165,000		.0818	.3771	2909	
		195.000			.3617	3/164	
		210.000			.3615	.3247	
		225.000			.2857	3572	
					.2863	.3128	
		240.000		124.042			
		270.000	.0350	0120	1155	.1323	
		300,000			.1003	.1295	
		330,077			.2113	.1392	



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DATE 01 MAY 75
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#### TABULATED SOURCE PRESSURE DATA - \$249 ( MRC 11-014 )

PAGE 1043 -

(REUT43) ( 22 OCT 74 ) ARC11-014TA19 OTS SRB-NOW MPS-OFF EXT TANK REFERENCE DATA PARAMETRIC DATA SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT ELV-18 = .000 .000 ELV-08 = RUDDER = LREF = 1290.3000 IN. YMRP = .0000 IN. YT MACH = .900 .000 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT ' GIMBAL = 1.000 SCALE = .0200 SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP ALPHA ( 1) = -8.133 BETA ( 1) = X/L . 634 .742 .851 HI .000 .0104 -.2692 30.000 -.0877 -.0031 -.2703 60.000 -.0428 -.0097 -.1607 ORIGINAL PAGE IS OF POOR QUALITY 90.000 -.0235 -.0057 -.0127 .2125 120,000 .0138 -.0787 -.0006 135,000 .0300 -.0897 .2115 150,000 .0390 .0704 .1001 165,000 .0322 .0401 -.1137 195,000 .0499 -.1539 210.000 .0457 -.0798 225.000 -.0471 ,1647 240,000 -.1060 -.0678 270.000 . -.0294 +.0196 -.0143 .1743 300,000 JU19 -.1442 339.000 -.0000 -.2937 ALPHA ( 2) = -4.002 BETA ( 1) = X/L . 634 .742 .851 .986 PHI .000 .0191 -.2618 30.000 -.1062 .0046 -.2647 60,000 -.0729 .0034 -.1869 90.000 -.0496 -.0090 .0233 .1839 120,000 .0179 -.0067 .0081 135,000 .0319 -.0268 .2475 150,000 .0430 .1140 .1115 165,000 .0388 .080% -.1009 195,000 .0719 -.1265 210,000 .0759 -.0208 225.000 -.0008.2721 240.000 -.0420 .0128 270,000 -.0498 -.0225 0000 .2114 300.000 .0048 -.1773 330.000 -.0022 -.2893 . ALPHA ( 3) = -.342 BETA ( 1) = -4.000 XZL .742 .851 .986 HI

.000

**30**.000

60 1000

90.000

120,000

.0025 -.2688

.0196 -.2017

-.2731

.1082

.1651

.0011

.0474

.1381

-.0953

-.D48B

.0344

.0818

ARC11-014TA19 OTS SRB-NOM MFS-OFF EXT TANK

(REUT43)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	IABLE CP			
ALPHA ( 3) =342 BETA ( 1) = -4.000	X/L PHI	. 634	,742	.851	.986
	135,000		.0984	.1582	.4977
	150,000		1141	.3946 -	.3617
	165.000		.0683	.3543	•1 520
	195,000			.2157	0585
	210.000			0422	1320
	225,000			0140	.0733
	240.000			0487	0671
	270.000	0912	0945	0737	.2801
	300,000			0245	1972
	330.000			0115	2947
ALPHA (3) =357 BETA (2) = .012	X/L FHI	. 634	.742	8 51	.986
	.000			-0183	2637
	נוכונו. נוצ		1274		2639
	60.000	•	0934		2003
	000.00	0569	0269		.2065
	120.000		·0560	.0306	.0938
	135,000		.0408	0049	3568
	1 50 .000		.0564	.1376	.1312
	165.000		.0521		0836
	195,000			.0940	1183
	210,000			.1173	.0138
	225,000			.0320	.3439
	240,000			0075	.0665
	270,000	0597	0382	0160	·2169
	300.000			.0055	1855
	330.000			.0014	5809
ALPHA (3) =288 BETA (3) = 4.022	X/L PHÍ	. 634	.742	.851	.986
	.000	•		.0105	2592
	30,000		1321	0064	2637
	0000,09		1114	0285	1975
	90.000	0842	0739	0850	.2757
	120,000		.0033	0208	0677
	135,000		.0063	0341	.0844
	1 50 ,000		.0039	-1109	.0923
	165.000	•	0212	.0261	0818
	195.000			.2276	1087
	210.000			.2779	.1533
	225.000			.1812	.3970
	240.000	•		1079	.1535
	270.000	0364	.0249	.0722	.1120
	300,000			.0408	1728

(REUT43)

						•							
•							AR	C11-0	141A19 OT	s s	RB-NOM N	(PS+OFF E	XT TANK
SECT	TON	<b>( 1</b> )	EXTER	NAL TANK				DEF	ENDENT VA	RIABLE CF	i		
ALPHA	. ( 3	=	28	8 BETA	( )	s) =	4.022		X/L PHI	. 634	.742	.851	.986
									330.000			.0083	2736
ALPHA	(4	) =	3.92	4 BETA	( )	() =	.000		X/L	. 634	.742	.851	. <b>9</b> 86
									HI				
									.000				2651
									30.000			0107	2784
									60.000		1162	0230	2021
									90.000	0570	0564	0971	.0908
									120.000	•	.0421	.0554	-1114
							•		135,000		.0613	.0146	4068
									150.000		.0792	.1624	.1448
									165,000		.0778		0744
									195,000				1932
									210.000			.1653	.0240
			3 1	**					225,000			0664	.3774
									240.000	0040	0776	.0309	.0662
									270 .000	- 10040	0775		.0932
									300.000			0173	1916
									330 .000			0109	2929
		٠.	7.06	2 BETA	, ,	() =	.000		X/L	63.4	.742	0.54	.986
METTO		, -	1130	E DCIA	٠,	., -			PHI	.654	1142	10.31	1900
			• 1					•	.000			.0140	2390
									30,000		1519	0020	2530
									60.000			0237	- 2059
	•								90.000	0368		1173	.0166
									120.000	-,0300	.0516	1173	.0168
									135.000		.0735	.0290	.4382
									150.000	•	.0953	.1798	.1580
			-										-
									165,000		.0933	.1374	0659
									195,000			.1336	0912
									210.000			.1864	.0424
									225,600			.0942	.3879
							-		240.000		4055	-01642	.0746
									270.000	0549	1056	1553	.0000
			1.						300 .000		•	0229	1853
									330 .000			0070	273!1

OF BOOK OUALL

ARC11-014TA19 OTS

SRB-NOM MPS-OFF EXT TANK

(REUT44) ( 22 OCT 74 )

PARAMETRIC DATA

#### REFERENCE DATA

SCALE = .0200

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

SECTION ( 1) EXIERN	AL TANK			DELEMBERS AND	GADLE CI			
ALFHA ( 1) = -8.106	BETA	(1)=	.000	X/L PHI	.634	.742	.851	.986
				.000			.2339	0066
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				30.000	•	1079	2201	.0214
•				60.000		0987	2193	.1943
				90.000	- 1376	0239	.1494	.4145
				120,000		0222	.1272	.0773
				135,000		.0426	.1306	2696
				150.000		.0528	.2263	.2340
		•	•	165.000		.0542	.2006	.0382
•				195.000			.1748	.0497
				210.000			.1822	.1226
•				225,000			.1299	2994
				240.000			.1066	.0870
				270.000	1586	0314	.1281	.4420
				300.000			.2281	.2231
				339.000			.2297	.0104
· · ·						•		
ALPHA ( 2) = -4.036	BETA	( i) =	.000	X/L	- 534	.742	.851	.986
				PH I				
				.000			.2362	.0110
				30,000	,	.0375	.2294	.0468
				co.co		.9599	.2270	.1534
				90.000	1036	.0809	.2202	.3984
				120:000		.1080	.1881	.1141
				135,000		.1237	.1862	.3256
				1 50 - 000	•*	.1277	.2636	-2639
				165.000		.1229	.2318	.0649
•				195.000			.2262	.0515
				210.000			.2373	.1384
	•			225,000			.1897	.3288
				240.500			.1668	.1012
				270,000	1014	.0662	2196	-3538
				200.000			.2284	.1695
				330.000			2249	.0397
ALFHA ( 3) =36	BETA	( <u>f</u> ) = -	4.003	X/L PHI	634	.742	.851	986
				.000	,		.2085	.0114
				30,000		0357	-2123	.0162
	•			60.000		.0439	2338	.0757
				000.00	.0515	.1582	.2855	3121
•				120.000	121213	.2115	-3289	.3352
				1 50 (000)		·C113	.7563	. 77 75

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AR	C11-014TA19 OT	s s	RB-NOM M	PS-OFF E	XT TẠNK
SECTION ( 1) EXTERNAL TANK	DEPENDENT VAI	RIABLE CF	;		•
ALPHA ( 3) =363 BETA ( 1) = -4.003	Χ/L	-634	.742	.851	.986
	PHI				*
	135,000		.2311	.3552	. 63 50
	1 50 .000		-2431	.4695	- 541.4
	165.000		.1833	• 51 49	
	195.000			3769	1096
	, 510,000			.1014	.0344
	225.000			1596	.2100
	240.000			.1373	.0896
	270.000	0662	.0864	.1740	.2884
	300.000			.1710	.0373
	330.000			.1911	.0038
ALPHA ( 3) =363 BETA ( 2) = .012	X/L -	. 634	.742	.851	.986
	FΗI				
	.000			.2145	.0182
	30,000		0489	2031	.0347
· · · · · · · · · · · · · · · · · · ·	en .nnn		.0047	-2956	.0870
	90 .000	0129	.1181	.2435	.2809
• *	120,000		1 63.1	.2236	.2043
	135.000		.1773.	.2226	3888
	150,000		.1771	-3/154	.2948
	165.000		.1733	.2741	.0989
· · · · · · · · · · · · · · · · · · ·	195,000			.2667	.0826
	210.000			.2792	.1699
•	225,000			.2286	.3865
	240 .000			2059	.1582
	270,000	0033	.1034	.2348	.2840
	300 .000			.2126	1285
	330.000			•2036	.0232
ALPHA (3) =393 BETA (3) = 4.022	X/L FHI	634	.742	.851	.986
·	.000			.2157	.0334
	30.000		.0572	-2065	
	00.000		.0734	.1848	.0428
	90.000	0847	1010	.1974	.3300
	120.000		1297	1733	
•	135.000		1282	1629	.2294
	150,000		.1179	.2681	.2525
	165.000		0682	.1629	.0159
	195,000		101002	.3965	.2940
	210.000				
	225.000		•	4331	.3765
				3743	.5774
	240,000	0.00		-3130	3736
	270,000	.0332	1356	.2984	32!11
	300,000			.2540	.1268

(REUT44)

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:

ARC11-014TA19 OTS

SRB-NOM MPS-OFF EXT TANK

(REUT44)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARI	IABLE CP			
LPHA (3) =393 BETA (3) = 4.022	X/L PHI	634	.742	.851	,986
	330 .000			.2247	.0226
LFHA ( 4) = 3.888 BETA ( 1) = .000	×/L	. 634	.742	.851	.986
	FH İ				
	.000			:1737	.0030
	30,000		0636	.1644	0011
	60.000		.0051	.1605	.01 50
	90.000	.0773	.1264	.1541	-2351
	120.000		.1891	2572	.2628
	135.000		.2114	.2452	4306
	1 90 .000		.5500	-3321	.2942
	1 65 .000		.2183	.3/148	
	195,000			.2973	.1101
	210,000			.3109	1799
	225,000			.2676	.3460
	240.000			.2466	.204
	270.000	.0772	.1158	1494	.2369
	300.000			.1658	.0250
	330 .000			.1644	0114
ALPHA ( 5) = 7.977 BETA ( 1) = .000	Χ/L	.634	.742	.851	.986
	FHI				
	כוכונו.			1390	0042
	30.000		0456	.1337	015
	60,000		.0135	.1160	008
	90.000	.1275	.1174	.0815	.184
	120.000		.1944	.27.17	.246
	135,000		.2133	.2620	.396
	150,000		.2265	.3385	.294
	165.000		.2283	.3126	.197
	195.000			.3067	.112
	210.000			.3213	
	225.000			.2786	
	240.000			.2559	.213
	270.000	.1214	.0960	.0566	. 1 61
	300.000			.1251	.006
	330.000			.1344	025

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DATE OF MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( APC 11-014 )

PAGE 1049

DATE 01				ARC	11-0141A19 OTS	SR	B-NOM ME	S-OFF EXT	TANK		REUT4	(22.0	CT 74 · )
	•										PARAMETRIC	DATA	
	REFO	RENCE DAT	Γ <b>A</b>								•		.000
	2690.0000	SO FT	XMRP	= 976.	0000 IN. XT				E_V-10		.000	ELV-CB =	1.250
			YMRP		0000 IN. YT				RUDDE		.000	MACH" =	
LREF =	1290,3000	IN.			0000 IN. ZT				, GI MBA	_ =	1.000		
	1290.3000		Z PRC		Creation (E-1)		;					,	
SCALE =	.0290												
SECTIO	N ( 1) EXTER	NAL TANK			DEPENDENT VAR	IABLE CP	1 .						
	1) = -8.24			=009	X/L	. 634	.742	.851	.986				
ALFHA (	1) = -8.24	-	`		PHI			*	25.0				
				.*	.000			0177	.0099				
					30.000		20146	0576	.0290		~ ~		
					60.000		1278	0868	.1333		ORIGINAL OF POOR		
					90.000	0511	1056	0152	.3104		7 2		
					120,000		0431	0447	1932		<b>P</b> 93		
					135,000			1439	.3566		82		
					1 50 .000		0307	.1719	.3072		); F	•	
1		•			165.000		0439	.1618	.1211		GINAL PAGE IS		
			:		195,000			.1494	.0863		₽ ৮		
					210.000			.1480	.1042		A J		
		• •			225,000			0318	.2992		PAGE		
							•	0466	.1415				
•				•	240.000	- 11606	1372	.0070	.3258		Z E		
		• .			270 .000 300 .000	(1000	- 11312	0800	.1762			-	
	• .							0644	.0247				
					330.000				_			. •	
					X/L	634	.742	.851	.986				
ALPHA	(2) = -3.9	36 BETA	. ((1)	=009		. 604					٠.		
100			•		PHI (222)			.0264	.0687				
. •					.000		- 1031	0148	.0755				
		•			30.000				.0469				
					60,000	1		0301					
					90.000	0576	0916		.2869			٠.	
					120,000		0683		.3/11.4				
		•			135,000			1941	.4466				
	1.5				150,000		0238		3454				
					165,000		0463		.1483				
					195.000			1854	.1114				
					210.000			.1839	.1447				
	• ,		•	. •	225,000			.0435	.3445				
					240.000			.0377	.2296				•
					270.000	0701	0976		2816			•	
	•				300.000			0297	.0539		-		
			• .		330.000			0231	.9729				
					333, 1000								
				, gan	X/L	634.	.742	.851	.986				
ALPHA	( 3) =3	KIO BETA	(1)	= =4 (UN)	HI V	1034.	,						
								1880	.1112			•	
					.000		_ 4055		.0989				
					30.000		1053	9001 9001	1292				
					AND 101010		- 0.442	2 27 16 1	.1747				

eo .000

90.000

120,000

-.0442

-.0129

.0360 -.0131

.2001

.1840

.3398

.2949

ARC11-0141A19 OTS

SRB-NOM MES-OFF EXT TANK

.2810

.1780

.2045

.0139 -.0289

.4722

.3292

1256

(REUT45)

SECTION ( 1) EXTER	NAL TARK		:	DEPENDENT VA	RTABLE CE				
Section ( Trevion	INC. INIC	•	-						
ALPHA ( 3) =30	9 BETA	(1) =	-4.000	X/L PHI	. 634	.742	.851	.986	
				135,000		0298	.3594	.7797	
				1 50 .000		.0525	.4889	6453	
				165.000		.0096	.5357	.4772.	
				195,000			.3381	.1632	
				210.000			.0525	.0294	
				225.000			.0961	.1719	•
				240.000			.0678	-1521	•
en e				270,000	1384	1370	0000	.3671	
				300.000			.0813	.1142	•
•			•	330.000			.1719	.1038	. 1.
ALPHA ( 3) =38	D BETA	(5) =	.009	X/L FHI	634	.742	.851	.985	ORIGINAL PAGE IS OF POOR QUALITY
	•			.000			1507	.0897	<b>₩</b> £3
				30.000		1864	1341	.1024	82
				60.000		1178	.0753	.1103	$\overrightarrow{x}$
				90.000	0533	0918	.0145	4086	~ [
				120.000		0791	.1549	.3427	~ ₹
				135.000		0437	.0926	.4780	AA
				150.000		0087	.2904	. 39 5/7	$\vdash$ $\mathfrak{D}$
				165.000		0244	-2724	.2090	
				195,000			.2407	.1618	
				210.000			.2413	2004	-1,02
				225.000			.1596	.3833	
				240,000			.1353	.2717	
				270.000	0724	1037	.0098	. 4363	
				300 , 000			.0642	.1102	
				330 (000			.1188	10948	
MLPHA ( 3) =40	5 BETA	( 3) =	4.025	Χ/L	634	742	.851	.986	
				FHI	•				
				.000			1793	.1099	
				30.000		2629	.1842	-1041	
				eo .000		1926	.0933	1054	
				90,000	1187	1345	0873	.42.78	
				120.000		0745	.0706	.1409	
•				135,000		0584	.0625	.2285	
		•		1/50 ,000		0447	1926	.2248	
				165,000		0939	1090	.0609	
	•			195.000			3658	.3740	
				210.000			.3970	.4725	
				225,000			.3619	6742	
				0.40.000					

240.000

270 .000

300.000

	AR	C11-014TA19 OTS	S	RB-NOM M	PS-OFF E	XT TANK
SECTION ( 1) EXTERNAL TANK		DEPENDENT VAR	TABLE CP		•	
ALFHA ( 3) =405 BETA ( 3) =	4.025	K/L X/L	. 634	.742	851	.986
		330.000		*.	-2023	.0931
ALPHA ( 4) = 3.873 BETA ( 1) =	.000	X/L	634	.742	.851	.986
		PHI				
		.000			.2543	1025
	•	30.000		1814	.2321	.0892
		00.000		1078	2109	.1242
		90.000	0394	0834	.0639	.2881
		120.000		0134	.2791	.377
		135 000		.0299	.2738	.4673
		1 50 , 000		-0.530	.3612	. 40 69
		165,000		.0513	.3346	.2231
		195,000			-3189	-217
		210,000	•		.3192	.254
		225,000			.2697	.3609
		240.000			.2529	.294
		270.000	0651	0858	.0399	.3262
· .		300.000			-2051	.1142
		330,000			.2289	.0798
LPHA ( 5) = 7:989 BETA ( 1) =	.000	X/L PHI	. 634	. 742	.851	986
		000			.2587	.1040
		30,000		0923	2183	.0775
		60.000		0274	.1852	.071
		90.000		.0094	.0199	.1540
		120,000	· · · · · · · · · · · · · · · · · · ·	.1193	.3334	.3496
		135.000		.1416	.3268	.4615
and the second s		150.000		.1585	4015	.3981
		165.000		.1681	.3733	.2340
		195.000		.1001	3520	.2279
		210.000			3498	.281
		225.000		•	.3184	-3555
		240.000			.3047	.2800
		270 .000	. mie	0075	.0360	.1912
		300 ,000	versit Q		.1940	.0741
		330,000			.2201	.0709
		330 (000				10 (0.9
					_	

(REUT45)

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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1052

ARC11-0141A19 OTS

SRB-NOM MFS-OFF EXT TANK

(REUT46) ( 22 OCT 74 )

#### REFERENCE DATA

PARAMETRIC DATA

SPEE	=	2600.0000 SQ.FT.	XMRP	=	976,0000 IN. XT		-	ELV-IE =	.000	ELV-CB =	.000
		1290.3000 IN.	YMRP		.0000 IN. YT			RUDDER =	.000	MACH =	1.400
		1290.3000 TN.	ZHRP	=	400.0000 IN. ZT			GIMBAL =	1.000		

SCALE = .0200

SECTION ( 1) EXTERNAL TANK

DEFENDENT VARIABLE CP

ALEHA (1) = -8.175 BETA (1) = .003	X/L	. 634	.742	.851	986
	FH!				
	.000			0281	0211
	30.000		1444	0721	.0136
	60.000		0747	1100	.1274
	90.000	0009	0737	0366	.4107
	120.000		1056	0100	.2841
	135,000		1007	1706	.3996
	150.000	,	1084	.1666	.3750
	165,000		1414	.1678	.2041
	195-1000			.1419	.1525
	210.000			.1427	1457
	225,000			0043	.2798
	240.000			0453	.2297
	270 .000	0720	0924	0432	.3859
	300.000			0912	1283
	330.000			0689	.0002
ALPHA ( 2) = -4.002 BETA ( 1) = .003	X/L FHI	. 634	.742	.851	.986
	.000			0033	.0069
	30 .000		1412	0445	.0128
	60.000		0742	0658	.0473
	90.000	0171	0570	0118	4593
	120,000		0825	.0513	.3501
	135,000		0901	1064	. 4971
	1 50 .000		1097	.23 53	.4187
	165.000		1286	.2273	-2411
	195,000			.1883	.1922
	210.000			.1858	.1980
	225,000			.0906	.3416
	240.000			.0603	.2751
	270 .000	0759	0839	0077	.4595
	300,000			0577	.0498
	330.000			0426	.0045
ALRHA ( 3) =348 BETA ( 1) = -4.000	X/L FHI	634	.742	851	.986
	.000			0012	.0524
	30.000		0702	0252	.0390
	90 .000		0101	.0283	.0390
		0/20			
	90.000	.0130	.0049	.0900	2857
	120.000		.0209	.2297	. 6001

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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1053

DATE US MAY 75	INBULATED S	JURIE PRESSURE U	AIA - IAI	9 CARC	11-014 /		
		ARC11-014TA19 OT	s s	M. MCH-89	PS-OFF E	XT TANK	
SECTION ( 1) EXTERNAL TANK		DEFENDENT VA	RTABLE CF	;			
ALIPHA ( 3) =348 BETA	(1) = -4.00	D X/L PHT	, 634	. 742	.851	.986	
		135,000		0030	.1953	.7476	
		150,000		0101	.4301		
	•	165.000			4786	. 5425	
		195.000			.2884	2361	
		210,000			0829	.0693	
		225.000			.1073	.1928	
		240.000	. •	*	.0835	.2057	
		270 .000	0925	1113.		.2593	
		300.000	*******		1141	.0582	
		330.000			0369	.0919	
ALPHA ( 3) =369 BETA	(2) = .01	6 X/L	.634	.742	.851	.986	
		.000		,	.0019	.0336	
		30,000		1436	0323	.0481	
		60.000	.*		0473	.0644	
		90.000	0211	0482	_	3478	
		120.000		0415		.4221	
		135.000			0448	.5436	
		150,000		0834	.3020	.4588	
		165,000		0861	.2895	.2749	
		195.000			2524	.2458	
	•	210.000	•		.2524	2483	
		225,000			1763	.3821	
		240,000			-1502	,3129	
		2701,000	0595	0735		.3787	
		300,000			0485	.0704	
		330.000			1325	.0421	
ALPHA ( 3) =360 BETA	(3) = 4.02	8 X/L	. 634	.742	.851	.986	
		PH!					
		.000			.0011	.0527	
		30,000		2050	0362	.0556	
		60 - 000 0		1389	- 1241	.17548	
		90,000	0572	1004	1097	.2926	
	•	129,000		0972		1991	
		135,000		1107	.1054	.2641	
•		150.000		1506	.2169	.2679	
		165,000		1906	.1464	.1467	
		195,000		•	.2811	.4024	
	4	210.000			.3194	.4564	
		225.000			.2756	5681	
		240.000			1 639	. 4973	
		270,000	0061	0191	.0469	-3116	

300.000

,0227

-0935

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(REUT46)

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(REUT46)

SECTION ( 1) EXTERNAL TANK  DEPENDENT VARIABLE CF  X/L .634 .742 .851 .986  PHI 330.00000256 .0334  ALPHA ( 4) = 3.900 BETA ( 1) = .006 X/L .634 .742 .851 .986  PHI .000	ARC11	-0141A19 OTS	s s	RB-NOM M	PS-OFF E	CT TANK	(REUT46)
Hell 330,000  -,0256 ,0334  ALPHA (4) = 3,900 BETA (1) = .006  ML	SECTION ( 1) EXTERNAL TANK	EPENDENT VAR	TABLE CP		•	٠	
ALPHA (4) = 3,900 BETA (1) = .006  ALPHA (5) = 7.653 BETA (1) = .006  ALPHA (1) = 3.000  AL	ALPHA (3) =360 BETA (3) = 4.028		634	.742	.851	.986	
PMI					0256	.0334	
30.00015000117 .1392 60.000000740253 .0564 90.000000740253 .0564 90.00000130 .2440 .4359 120.00000130 .2440 .4359 135.00000071 .1483 .5348 150.00000071 .1483 .5348 150.00000075 .3817 .4894 165.0000 .0095 .3649 .3107 195.00003264 .3304 .3060 210.00003264 .33091 225.0000 .2540 .4044 240.00002540 .4044 240.000001720830 -10176 .1524 300.0000017208300176 .1524 300.000001720830 .1076 84.00000255 .0529 300.00000114 .1399  ALPHA ( 5) = 7.653 BETA ( 1) = .006	ALPHA (4) = 3.900 BETA (1) = .006		. 634	.742	.851	986	
30.000					.0222	.1530	
RELIDOD07740253 .0564 90.0000 .003906490836 .1940 120.00000130 .2440 .4359 135.00000275 .3817 .4894 165.00000275 .3817 .4894 165.0000 .0095 .3649 .3107 195.0000 .0095 .3649 .3107 195.0000 .3304 .3080 210.0000 .3281 .3091 225.0000 .2249 .3511 270.0000017208301076 .1524 300.0000017208301076 .1524 300.0000017208300114 .1399  ALPNA (5) = 7.653 BETA (1) = .006				1500	0117	.1392	
90.000						.0564	
120.000			.0039			1940	
ALPNA (5) = 7.653 BETA (1) = .006  ALPNA (5) = .0080							
150.0000275 .3817 .4894 165.000 .0095 .3649 .3107 195.000 .3281 .3091 225.000 .2540 .4044 240.000 .2249 .3511 270.000017208301076 .1524 300.000017208301076 .1524 300.000017208301076 .1524 300.0000114 .1399  ALPNA (5) = 7.653 BETA (1) = .006							•
165,000							•
195.000				-		.3107	
210.000						.3060	
225.000						.3091	
240.000					.2540	.4044	
270.000017208301076 .1524 300.00001720855 .0529 330.0000114 .1399  ALFNA (5) = 7.653 BETA (1) = .006					.2249	.3511	
300.0000255 .0529 330.0000114 .1399  ALPNA (5) = 7.653 BETA (1) = .006			0172	0830	1076	.1524	
330.0000114 .1399  ALPNA (5) = 7.653 BETA (1) = .006					0255	.0529	
PHI					0114	.1399	
.000 .2259 .1909 30.0001367 .1964 .1496 60.0000753 .0780 .1144 90.000 .0952 .2952 .3821 135.000 .0736 .2862 .4966 150.000 .0883 .4068 .4603 165.000 .0883 .4068 .4603 165.000 .0716 .3786 .2988 195.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .031601801258 .1213 300.000 .0358 .1245	ALPHA ( 5) = 7.653 BETA ( 1) = .006		. 634	.742	.851	.986	
30,0000753 .0780 .1144 90.0000753 .0780 .1144 90.000 .046001891215 .1208 120.000 .0502 .2952 .3821 135.000 .0736 .2882 .4966 150.000 .0883 .4068 .4603 165.000 .0716 .3786 .2988 195.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2899 .3186 270.000 .031601801258 .1213		-			.2259	.1909	
60.000				4367			
90.000 .046001891215 .1208 120.000 .0902 .2952 .3821 135.000 .0736 .2862 .4966 1.50.000 .0883 .4068 .4603 1.65.000 .0716 .3786 .2988 1.95.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2899 .3186 270.000 .031601801258 .1213 300.000 .0958 .1245							
120.000 .0932 .2952 .3821 135.000 .0736 .2862 .4966 150.000 .0883 .4068 .4603 165.000 .0716 .3786 .2988 195.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2699 .3186 270.000 .031601601258 .1213			.0460				
135.000 .0736 .2862 .4966 150.000 .0883 .4068 .4603 165.000 .0716 .3786 .2988 195.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2699 .3186 270.000 .031601801258 .1213 300.000 .0958 .1245	The state of the s						
150.000 .0883 .4068 .4603 165.000 .0716 .3786 .2988 195.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2699 .3186 270.000 .031601601258 .1213 300.000 .0958 .1245						.4966	
165.000 .0716 .3786 .2988 195.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2699 .3186 270.000 .031601801258 .1213 300.000 .0958 .1245							
195.000 .3646 .3127 210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2699 .3186 270.000 .031601801258 .1213 300.000 .0958 .1245							
210.000 .3479 .3315 225.000 .2897 .3642 240.000 .2699 .3186 270.000 .031601801258 .1213 300.000 .0958 .1245							
225.(XX) .2897 .3642 240.(XX) .2699 .3186 270.0X) .031601801258 .1213 3X(0.0X) .0958 .1245							
240.000 .2699 .3186 270.000 .031601801258 .1213 300.000 .0958 .1245							
271. 1258 -1213. 031601801258 .1213 300. 000 .0958 .1245							
3000,0000 .0958 .1245			.0316	0180			
•	en e						

DATE OI MAY 75.

# TABULATED SOURCE PRESSURE DATA - TAIS ( ARC 11-014 )

PAGE 1055

ARC11-014TA19 OTS SRB-OFF MPS-OFF EXT TANK

(REUT47) ( 22 OCT 74 )

#### REFERENCE DATA

#### PARAMETRIC DATA

		*			SQ.FT.	XMRP	z -	976.0000				. •			ELV-IB RUDDER		000.8 000.	ELV-CB MACH	=	.000
	LREF BREF	:		.3000 .3000		YMRP ZMRP	=	400.0000	IN.				•,		GIMBAL		1.000		-	• • • • • • •
	SCALE			.0200		LPIN	-	4007107070707												
:	SECT	TON	(1)	EXTER	NAL TANK	•		DEP	ENDEN'	T VAR	IABLE CF							•.		
	ALPHA	C	1) =	-4.05	BETA	(1)=		003	X/L		.634	.742	.851	.986		•				
									PHI.	200		•	1212.002							
					•	*				300		4 477	0060	.0126						
	•								30.0				0482	.0074			•			
									60.0				0658	.0421						
									90.0		0218	000		4534						
									120.0			(1917	.0475	.3474						
								•	135.9			0954		.4956						
							2		150.0			1070	229(1	.4183				•		
				-					165.			1334	.2257	.2433						
			•						195.				.1840	.1960						
									210.0		•		1853	.1949						
									225.				.0883	.3331			•			
									240.1				JUS 58	.2750						
									270.0		6813	0869		4560						
									300.0				0588	.0464						
									330.0	EILI			0459	.0003						
	ALPHA	( 2	2) =	15	BETA	(1) =	= -4.(	000	X/L		. 634	.742	.851	.986						
									ĦΙ											
										000			.0000	.0510						
		•							30.0	ממל		0723	0251	.0371			•			
									ea.c	ינונע		0082	.0266	.0854						
									90.0	770	.0135	-0007	.0884	.2724						•
									120.0	200		.0206	.2297	. 5984						
									135.1	170		0017	.1915	. 751 7						
									150.0	777		0172	.4296	.6745						
									165.0	777		.0381	. 4810	. 5303				•		
								•	195.0	KKI			.2908	.2405						
									210.0	100			.0852	.0692			*			
						•			225.0	NN)			-1103	.1915	•					
									240.0	ווכו			.0856	.2048						
									270.0	177	0936	1131	1193	.2411		•				
									300.0	177	•		1139	. 10557						
				•					330.0	KOLO			0356	.0516		•				
	AL PHA	( 2	) <u>=</u>	- 120	BETA	( <u>2</u> ) =	r	109	X/L		. 634	. 742	.851	•986	•					
			-		- DE-17	, -	•		PHI		. 034		1031	1900			•			
										100			.0027	.0346						
									30.0			1443		.0490						
									60.0				- 0459	.0650						
									99.0		0179	0 509		.3319						
							•					121213	********							

ARC11-014TA19 OTS SRB-OFF MFS-OFF EXT TANK

(REUT47)

SECTION ( 1) EXTERNAL TANK DEFENDENT VARIABLE CP										
ALPHA (2) =129 BETA (2) = .00	9 'X/L PHI	. 634	.742	.851	.986					
	135.000		0504	0226	. 541 5					
	1 50 .000		0825	.3076	.4682					
	165,000		1047	.3000	.2923					
	195,000		,	.2557	.2528					
	210,000			.2529	2497					
	225.000	**		.1801	.3748					
	249.000			1 505	∙31€2					
	270,000	0567	0761	0288	3582					
	300.000			0515	.0693					
	339.000			0288	.0423					
ALPHA ( 2) =234 BETA ( 3) = 4.020	X/L FHI	-634	.742	.851	.986					
	.000			0039	<b>.</b> 0540					
	30.000		- 2100	0402	.0559					
	60.000		1419	1235	.0505					
	90.000	- 0830	1058		.2735					
	120.000	- rescues	1002	.1134	.2007					
	135,000		1087		.2640					
	1 50 .000		1395	.2147	.2643					
	165,000		1778	.1455	.1475					
	195.000			.2888	.4057					
	210.000			3234	4592					
	225.000			2725	. 5998					
the second of th	240.000			.1553	5786					
	270.000	0070	0230	.0462	.2944					
	300.000			.0196	.0882					
	330.000			0263	.0318					
ALPHA (3) = 3.867 BETA (1) = .009	X/L FHI	. 634	.742	.851	.986					
	.000			.0219	.1478					
	30,000		1518	0135	.1339					
	60,000		0804	-,0237	.0485					
•	90,000	.0019	0694	0790	.1879					
	120,000		0149	.2469	.4342					
	135,000		0095	.1690	. 5378					
	1.50,000		0474	3810	5015					
	165.000		0056	3648	.3276					
	195.000		•	3272	.2943					
	210,000	•		.3278	2996					
	225.000			.2487	3969					
	240.000			2461	.3432					
	270.000	0216	÷.0889		.1479					
	300.000			0265	.0495					







CATE O1 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1057

ARC11-014TA19 OTS SRB-OFF HPS-OFF EXT TANK

(REUT47)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.867 BETA ( 1) = .009

.851 .986 X/L PHI

330.000

-.0131 .1327

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ARC11-014IA19 OTS SRB-NCM MPS-CFF EXT TANK

(REUT48) ( 22 OCT 74 )

#### REFERENCE DATA

# PARAMETRIC DATA

LREF. =	2690.0000 SQ.FT. 1290.3000 IN. 1290.3000 IN.	XMRP = YMRP = ZMRP =	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT	•	ELV-18 = RUCOER = GIMBAL =	8.000 .000 1.000	ELV-CB =	.000 1.400
SCALE =	.0200	• • •						
	·		OFFICENT MARIABLE CO					

SCALE = .0200							
SECTION ( 1) EXTERNAL TANK		DEPENDENT VAR	TABLE CP				
ALPHA ( 1) = -4.143 BETA ( 1) = -	.003	X/L	.634	.742	.851	.986	
		. PHI				00.00	
•		.900			0071	.0069	
		30.000	•	1465		.0116	
		60.000			0680	.0418	
		90.000	0207		0128	.4551	
		120.000		0894	.0497	.3451	
•		135,000		0962	1048	.4966	
		1 50 .000	1	1094	.2296	.4156	
		165.000		1337	.2257	.2462	
		195,000			.18 CO	.1935	
		210.000			.1818	.1937	
		225,000			.0897	3331	
		240.000			.0587	.2743	
		270.000	0827	0887	0125	.458.4	
		300.000			0608	.0468	
		339,000			0457	.0004	
ALPHA (2) =243 BETA (1) = -	4.003	X/L	. 634	.742	.851	. <del>9</del> 86	
		PHI			0020	.0494	
		.000		0700		.0390	
		30.000		0728	0267	.0874	
	•	60.000		0088	.0252		
•		90.000	.0131	.0023	.0893	.2802	
		120,000		.0194	.2285	.5996	
		135,000		0039	.1887	.7490	
		150.000		0165	.4264	6712	
		165.000		-0363	.4769	.5341	
		195,000		٠.	2848	.2357	
	•	210.000			.0843	.0699	
		225.000			.1075	.1877	
		240,000			.0819	2030	
		270,000	0948	1132	1163	.5465	
	•	300.000			1174	.0563	
		330.000			0391	.0491	
ALPHA ( 2) =324 BETA ( 2) =	.009	X/L	. 634	. 742	.851	.986	
		.000			0017	.0307	
		30.000	•	1485	0371	.0470	
		60,000		0810		.0614	
		90.000	0223	0529		.3443	
		120,000		0439		.4188	
	•	150 (000)		••••			



DATE 01 MAY 75

ARC11-D14TA19 OTS

SRB-NOM MPS-OFF EXT. TANK

(REUT48)

		ARC11	-014TA19 OTS	SRB-NOM MPS-OFF EXILIANA					
SECTION ( 1) EXTERNAL TAN	<b>K</b> .	0	EPENDENT VARI	IABLE CP		•			
ALFHA ( 2) =324 BETA	(2) =	.009	X/L	. 634	.742	.851	.986		
			PHI				#		
			135,000		0566	0324	.5407		
			150.000	•	0852	.2994	.4623		
			165,000	•	1084	.2941	.2845		
			195.000			.2494	.2482		
<u>.</u>			210.000			.2451	.2449		
			225,000		•	.1762	.3744		
	. •		240.000			.1511	.3095		
			270.000	0608	0772	0287	.3718		
			300.000			0539	.0685		
			330.000			0341	.0381		
AUTHA ( 2) =435 BET/	A (3) =	4.025	X/L PHI	.634	.742	.851	.986		
e in the first section			.000			0006	.0543		
			30.000		2093	0371	.0548		
			60.000		1400	1228	.0525		
			90.000	0575	1020	1093	.2841		
·			120.000		0980	.1000	.1997		
			135,000		1085	.1079	.2544		
			150.000		1453	.2181	.2661		
			165.000		1792	.1463	.1499		
	,		195,000			.2862	. 40167		
			210,000			.3267	.4592		
		•	225.000			.2746	. 5838		
			240.000			. 1617	. 5028		
			270,000	0069	0208	.0473	.3087		
			300 .000			.0203	.0913		
			330.000			0249	.0343		
ALPHA ( 3) = 4.032 BET	( 1) =	006	X/L PHI	. 634	.742	.851	.986		
			.000			.0245	.1,531		
			30.000		1 528	0106	.1465		
			60.000			0252	.0582		
			90.000	.0034	0708	0863	. 1973		
			120.000		0146		. 43 50		
			135,000		0094	.1641	. 5355		
• *			150.000		0421	.3846	4850		
			165.000		.0027		.3153		
			195.000	1		-3291	3065		
			210.000			.3288	3.793		
			225,000			2549	.4007		
			240.000			.2254	.3473		
•			270.000		0879		.1514		
			E (CONTRACTOR)			,			

300,000

OBIGINAL PAGE IS OF POOR QUALITY DATE OF MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1080

ARC11-014TA19 OTS SRB-NOM MFS-OFF EXT TANK

(REUT48)

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

ALPHA (3) = 4.032 BETA (1) = -.006 X/L .634 .742 .851 .986

PHI

339,000

-.0126 .1393

SRB-OFF MPS-OFF EXT TANK

4.000

.900

(REUT49) ( 22 CCT 74 )

ARC11-014TA19 OTS PARAMETRIC DATA REFERENCE DATA ELV-18 = 8.000 ELV-OB = SREF = 2690.0000 SQ.FT. 976.0000 IN. XT MACH RUDDER = .000 .0000 IN. YT LREF = 1290.3000 IN. YMRF = GIMBAL = 1.000 400.0000 IN. ZT BREF = 1290.3000 IN. SCALE = .0200 DEPENDENT VARIABLE CP SECTION ( 1) EXTERNAL TANK .742 .851 .986 X/L .634 ALPHA ( 1) = -4.041 BETA ( 1) = PHI -.2815 .000 .0029-.2851 -.1151 -.0121 30.000 -.2036 60.000 -.0789 -.0141ORIGINAL PAGE IS OF POOR QUALITY -.0461 -.0166 .0085 .1934 90,000 .0132 -.0240 .0176 120,000 .2517 .0265 -.0438 135,000 .0361 .0974 .1076 150.000 -.0988 .0352 .0661 165.000 .0698 -.1375 -195,000 .0730 -.0359 210,000 -.0075.2578 225,000 -.0093 .0029 240,000 .1896 -.0481 -.0322 -.0052 270.000 -.0075 -.1947 300,000 -.0125 -.3082 330.000 X/L . 634 .742 .851 .986 ALPHA (2) = -.198 BETA (1) = -4.003 ΉI (1,159 -.2663 000.0019 -.2694 30.000 -.1951 -.0466 .0233 60.000 .0384 .1109 90.000-.0141 .0502 .1640 .0857 .1387 120,000 .1007 .1597 .4977 135,000 .3/15/1 .3657 .1149 150.000.3563 .1577 165.000 .2144 195.000 .0421 -.1317 210.000 -.!7.738 .0756 225,000 -.0012 -.0626 240.000 -.0907 -.0731 .2698 270,000 -.0882 -.0214 -.1945 300.000 -.2915 330.000 - .0058 X/L . 634 .742 .851 ALPHA ( 2) = -.162 BETA ( 2) = -.009 ΡΗI .0235 - .2525 .000 .0065 -.2511 30,000 -.1257

60.000

90.000

120.000

- .0900

-.0208

.0309

-.0524

.0029

-.0041

.0341

-.1909 .2194

.0990

SRB-OFF MPS-OFF EXT TANK

(REUT49)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VAR	RTABLE CP			
ALPHA (2) =162 BETA (2) = .009	X/L FHI	. 634	.742	.851	.986
	135,000		.0481	0029	.3615
	150.000		.0620	.1430	-1434
	165.000		.0 600	.1192	0762
	195.000		, , , , ,	.0992	1077
	210.000			.1014	.0229
	225.000			.0361	.3463
	240,000			.0361	.0740
•	270.000	0592	0310	0105	-2151
	300.000			-0075	1726
•	330 .000			.0045	2684
•					
ALPHA (2) =285 BETA (3) = 4.022	₩L	. 634	.742	.851	.986
	.000			.0076	~.2594
	30.000		1267	0037	2646
	60.000		1059	0270	-,1961
	90.000	0810	0747	0859	.2689
	120,000		.0974	171 64	0632
• • • • • • • • • • • • • • • • • • •	135,000		.0118	0278	.0919
	150.000		.0082	.1172	.0987
	165.000		.0086	.0341	0778
	195,000			.2319	.1143
	219.000			.2282	1539
	225.000			.1836	4038
	240.000			.1826	-1049
	2701.090	0373	.0259	.0715	.1107
	300.000				1731
	330.000			10090	- 2751
ALPHA (3) = 3.828 BETA (1) =003	X/L	. 634	.742	.851	.986
And the second s	.000			.0138	2492
	30.000		1546	0045	- 2609
	60.000			0180	1885
	90.000	0537	17515	0945	1918
	120.000		.0435	JJ 61 4	.1163
	135,000		.0661	.0196	.4118
	1 50 ,000		.0836	.1674	1515
	4.65.000		.0848	1281	0695
	195.000			.1274	0954
	210.000			.1282	.0395
	225.000			.0754	.3874
	240,000			.0766	.0758
	270.000	0579	0713	0864	1033
	300.000			0097	1753

ORIGINAL PAGE IS OF POOR QUALITY



DATE D1 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1063

ARC11-014TA19 OTS SRB-OFF MFS-OFF EXT TANK

. (REUT49)

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.828 BETA ( 1) = -1003

.634 .742 .851 .986 · X/L

-.0037 -.2749 330 .000

A BAGE LAVIDIEO BOOT TO

ARC11-0141A19 OTS

SRB-OFF MPS-OFF EXT TANK

(REUT50) ( 22 OCT 74 )

REFERENCE DA	TA		•					PARAMETE	RIC DATA	
SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN.	YMRP = .000	O IN. XT O IN. YT O IN. ZT					ELV-IB : RUDDER : GIMBAL :	= .000	) MACH	= 4.000 = 1.100
SCALE = .0200										
SECTION ( 1) EXTERNAL TANK	DE	PENDENT VAR	TARLE CR							
SECTION ( TEXTERINE TAIN	UC	T CHOCKE THE	(INDEE C							
-ALPHA ( 1) = -4.017 BETA	(1) = .003	X/L THI	634	.742	.851	.986,				
		.000			2256	.0011				
		30.000		.0223	.2147	.0338				
	*	60.000		0437	.2104	.1464				•
		90.000	1053	.0584	2064	.3873			,	
		120,000		.0820	.1608	.1087				
		135.000		.0972	1 639	.3212				•
		150.000		.0980	.2443	.2593				
		165.000		.0944	.2112	.0540				
		195.000			.2082	.0328				
		210.000			2034	.1296				
		225.000			.1739	.3187		•		*
		240.000			.1732	.0848				
		270,000	0948	.0577	-5055	.3195			•	
	•	300,000			.2113	.1498				
		330.000			2072	.0170	•			
ALPHA ( 2) =162 BETA	(1) = -4.000	X/L PHI	634	.742	.851	.986				
		.000			.2100	.0146				

	240 (000)			11132	10040
	270.000	0948	.0577	-2022	.3195
	300.000			.2113	.1498
	330,000			2072	.0170
ALPHA (2) =162 BETA (1) = -4	.000 X/L	634	.742	.851	.986
	.000			2100	.D146
	30,000		0306	2153	.0212
	60.000		.0446	2384	.0848
	90.000	.0545	1607	.2896	.3073
	120,000		-2121	.3352	.3319
	135.000		.2345	.3582	.6331
	150.000	•	.2469	4704	.5452
	165.000		.1918	.5188	.3718
	195,000			.3840	.1142
	210,000			1435	.0370
	225,000			.1675	2093
	240.000			.1549	.0972
Control of the Contro	270,000	0610	.0844	.1752	.3165
	300.000			.1733	.0316
	330,000			1934	.0071
ALPHA ( 2) =141 BETA ( 2) =	.012 X/L	. 634	.742	.851	986
	.000			-2164	.0260
	30.000		0410	2085	.0430
and the second of the second o	60 1000		.0097	.2083	.0580
	000.00	0351	11913	.2412	.2494
	120.000		.1403	.2300	2306
	A contract				



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ARC11-014TA19 OTS

SRB-OFF MPS-OFF EXT TANK

(REUT 501)

				ARC	11-0141419 015	) 3 <del>1</del>	(D=Cut wit	G-CFF CA		
SECTION ( 1) EXTERNA	L TANK				DEPENDENT VAR	TABLE CP			•	
ALFHA ( 2) =141	BETA	( 2)	=	.012	X/L FHI	. 634	.742	.851	.986	
					135,000		.1 499	.2273	.4036	
					150.000		1 503	.3143	.3042	
	•				165,000		1 539	.2840	.1025	
	•				195.000			.2636	.0949	
					210.000			.2636	.1826	
					225.000			.2231	.3992	
*					240.000		***	.2224	.1804	
					270.000	0259	.0930	2176	.2682	
		•			300.000	10233	11/041	.2062	.1044	
					330 .000			.1987	.0301	
ALPHA ( 2) =234	BETA	( 3)	=	4.025	X/L	634	.742	.851	.986	
					PHI					
				. 1	.000			.2085	.0238	
•					30,000	•	.0535	.2003	.0260	
					60.000		.0768	.1776	-0351	
					90.000	0861	.1019	1855	«3461	F
					120,000		1327	.1672	.1152	<b>~</b>
•					135,000		.1273	.1585	.2258	
					150.000		.1173	.2602	.2527	
•					165,000		.0744	•1541	.0037	
					195,000			.3964	.2873	
					210,000			.3976	3706	
					225,000		•	.3711	. 5608	
					240.000			.3719	.2832	
					270.000	.0443	.1379	.2871	.3046	
					300,000			.2477	.1178	-
					330 -000			.2167	.0144	
ALPHA ( 3) = 3.879	BETA	(1)	.=	.000	X/L FHI	. 634	.742	.851	.986	
		•			.000			.1809	.0122	
					30,000		0407	.1711	.17174	
					60,000		.0234	1686	.0179	
					90,000	.0787	.1324	.1655	.2429	
					120.000		.1924	.2673	.2765	
•					135.000		.2132	.2552	.4347	
•				•	1 50 . 000		.2188	.3408	.3/112	
•					165.000		.5555	.3144	.1126	
					195.000			3044	.1251	
•					210.000	•		.3123	.1913	
					225.000			.2749	.3510	
					249.000			.2761	.2184	
						0007	1227	.1544	.2390	
					270.000	. 0007	.1227		.0327	•
					300 .000			.1701	1361	

OF POOR QUALITY

# CATE DI MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1066

ARC11-014TA19 OTS SRB-OFF MFS-OFF EXT TANK

(REUT 50.)

SECTION ( 1) EXTERNAL TANK DEFENDENT VARIABLE CP

ALFHA (3) = 3.879 BETA (1) = .000 X/L .634 .742 .851 .986

PHI.

330,000

1704 - 0007

PAGE 1067

4,000 1.250

ARC11-D141A19 OTS SRB-OFF MPS-OFF EXT TANK

(REUT51) ( 22 OCT 74 )

#### REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.	XMRF = 976.00	00 IN. XT					ELV-IB =	8.000	ELV-CE
LREF = 1290.3000 IN.		MO IN. Y.T					RUDDER =	.000	MACH
BREF = 1290.3000 IN.	ZMRP = 400.00	IOO IN, ZT		:			·GIMBAL =	1.000	
SCALE = .0200				·					
		SEED DELT U	07301 F C						
SECTION ( 1) EXTERNAL TANK		EFENCENT VA	RIABLE CP	."					
ALEHA ( 1) = -4.008 BETA (	(1) = .000	X/L	. 634	.742	.851	.986			
		PHI							
		.000			.0545	.0742			
•		30.000	:	1920	.0045	.0788		·	·
		60.000		1184	0117	.0442			20
		90 .000	0558	0878	.0357	.5665			- F
		120.000		0615	.0237	<b>.3</b> 000			15 E
		135.000		0508	0953	.4434			ス <sub>ラ</sub>
		150.000		0137	.2213	.3506		j	OF POOR OFF
		165.000		0289	.2097	1553		. 6	7
• 1		195,000			.1956	.1212		3	۲ ۲
		210.000			.1937	.1517			7 12
	•	225,000			.0460	.3457	-		, Q
•		240.000			.04€2	.2347			
		270 .000	0713	0943	.0341	.2753		Heen.	ller.
		300 1000			0137	.0628		· ·	WZC.
		330,000			0009	.0734			
LPHA ( 2) =138 BETA (	(1) = -4.003	X/L	. 634	.742	.851	.986			
		PHI							
		.000			1863	.1068			
And the second second second		30,000		1948	-2047	-1026	•		
•	. •	60,000		-,0408	.1999	.1239		•	
· .		90,000	.0365		.1806	.2852		•	
•		120,000		0080	.3396	- 5361			
		135.000		0317	3603	.7755			
		1 50 .000		.0515	49/19	. 6422			
		165.000		.0074	.5365	.4739			
•		195.000			.3457	1653			
•		210.000			.0926	.0294			
		225.000		٠.	.0973	.1695			
		240.000			.0984	.1482			_
•		270.000	1386	1312	+.0550	3629			
		300.000	,		.0885	.1061			
:		330.000			.1795	.1060			
		JJD 117676/			.1133	111001			
LPHA ( 2) =225 BETA (	(2) = .009	X/L	634	.742	.851	.986			
		HI			.•	٠,		•	
		0000			.1668	.0885			
		30.000		1866	.1605	.1917			
		000.09		1194	.0912	.1942			•
			<b></b> .						

90.000

120.000

.3883

.3355

-.0797

ARC11	-0141	A19	OT\$

SRB-OFF MPS-OFF EXT TANK

(REUT51)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARI				
ALPHA ( 2) =225 BETA ( 2) = .009	X/L FHI	. 634	.742	.851	.986
	135,000		0442	.1171	.4681
	150,000		0082	.2967	.3973
•	165.000		0186	.2777	.2089
	195.000		,	.2467	.1774
	210.000			.2463	.2057
	225.000	,		.1644	.3816
	240.000			.1641	.2767
	270.000	0725	1058	.0091	.4281
	300.000			.0702	.1104
	330 .000			.1353	.0949
ALPHA (2) =252 BETA (3) = 4.022	X/L	. 634	.742	.851	.986
	PHI				
	.000			.1816	-1134
•	30.000		2597	.1756	.1060
	60.000		1876	.0825	1041
	90.000	1137	1286	0798	.4245
	120.000		0724	.0786	.1442
•	135.000		0548	.0680	.2318
	1 50 .000		0427	.2000	.2328
	165.000		0979	.1169	.0629
	195,000			.3771	3891
	210.000			.3778	.4770
	225.000			.3699	.6774
	240 (000	D4.40	0004	·3341	.4749
	270.000	.□148	0291	.1895	
	300.000			.1951	.1278
	330.000			.2044	.0956
ALPHA (3) = 3.864 BETA (1) = .(XX)	X/L PHI	634	.742	.851	.985
	.000			.2514	.∏994
	30,000		1835	.2301	.0865
	60.000		1115		.1189
	90.000	~.0379	0881	.0514	.2846
•	120.000		0216	.2743	.3761
	135.000		.0280	.2674	.4636
	1.50 .000		522 تا،	3619	. 4/149
	165.000		.0562	.3351	22 5.1
	195,000		-	.3210	.21 60
	210.000			.3214	.2528
	225.000			.2671	.3582
	240.000			.2625	.2941
	270,000	0662	0896	.0421	.3148
	300.000			.2012	.1111





DATE 01 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS SRB-OFF MPS-OFF EXT TANK

(REUT51)

- SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALFHA (3) = 3.864 BETA (1) = .000 X/L .634 .742 .851 .986

PHI

330 .000

PAGE 1070

1.400

ARC11-014TA19 OTS SRB-OFF MPS-CFF EXT TANK

(REUT52) ( 22 OCT 74 )

### REFERENCE DATA

# PARAMETRIC DATA

SREF = 2600.0000 SQ.FT. XMRP = LREF = 1290.3000 IN. YMRP =	976.0000 IN. XT YY. AT 0000.		•	ELV-IB = RUCCER =	8.000 ELV-C .000 MACH 1.000
BREF = 1290.3000 IN. ZMRP = SCALE = .0200	400.0000 IN. ZT	•		GIMBAL =	1 .cc.cu
SECTION ( 1) EXTERNAL TANK	DEPENDENT VAI	RIABLE CP			
	.ooo X/L	.634 .742	.851 .986	•	
ALPHA ( 1) = -3.990 BETA ( 1) =	.000 X/L PHI	.004 .1742	1031 1301		
	.000		0021 .010	4	
•	39.090	1432			
	60,000		0635 .044		
	90.000	01860578	0120 .459		
•	120,000	0874	.0515 .35		ORIGINAL PAGE IS OF POOR QUALITY
	135.000		1070 .500		ORIGINAL PAGE OF POOR QUALI
	150.000	1061	.2330 .421		୍ୟୁ ହିନ୍ତି
•	165.000	-,1323	.2278 .249		<b>9</b> 月
	195.000	11323	.1887 .198		G
	210.000	•	.1907 .19		
	225.000		.0905 .336		Q ,
	240.000	•	.0598 .27		. Q. X
	270.000	07790870			F G
	300.000	- 10.715 10.010	0564 .04		
	330.000		0426 .002		R #
	2201.0000		- 15/420	. •	140
	4.003 Y/L	634 .742	.851 .98	3	
ALPHA ( 2) =195 BETA ( 1) = -	HI	1009 1176			
	.000		0024 .04	79	
	30.000	0750	0257 .03		
		=.0113	.0267 .089	-	•
	0000.09	.01180017	.0901 .27		
	90.000	.0175	.2308 .590		
	120.000	0066	.1910 .74		
	135,000				
	150.000	0204			
	165,000	.03.67			
	195,000				
the state of the s	210,000		.1052 .06		
	225.000		.1096 .18		
	240,000		.1092 .20		
	270.000	094811€2			
	300.000		1146 .05		
	330.000		0393 .04	8.5	
		7.0	054 00	e	
ALPHA (2) =198 BETA (2) =	.009 X/L	.634 .742	.851 .98		
	. PHI	•	nnee na	9.0	
	.000	=	.0026 .03		•
	30.000		0311 .04		
	60.000	0805			
	000.00	02140530			
	120,000	0434	.1557 .42	19	



PAGE 1071

ARC11-014TA19 QTS

SRB-OFF MPS-OFF EXT TANK

(REUT 52)

SECTION ( 1) EXTERNAL	TANK			DEPENDENT VARIABLE CP							
ALPHA ( 2) =198	BETA	(2) =	.009	ΧL	. 634	.742	.851	.986			
				PHI		0525	0289	. 5395			
				135.000		0828	.3049	4638			
				150.000	•	1081	.2958	.2854			
•				165,000		- 11001	.2531	.2495			
				195,000 210,000			.2533	.2495			
				225.000			.1806	.3761			
•				240.000			.1792	3120			
				270.000	0582	0788		.3621			
				300,000	0302	-10100	0495	.0670			
	•	:		330 .000			0300	.0398			
ALPHA ( 2) =186	BETA	(3) =	4.022	X/L	. 634	.742	.851	.986			
				FHI	•	•					
				.000		-		.0533			
				30.000		-	0358	.0539			
				60.000			1225	.051 5 .2761			
				90.000	0604		1152	.2004			
				120.000		0980	.1021	.2609			
				135.000	•	1955	.1072				
				150.000		1377	.2148	.2647			
•				165.000		1772	.1475	.1475			
				195.000			.2933	. 4067 . 4643			
				210.000			.3280				
				225.000			.2743	.5973			
*				240.000		204.0	1550	.29:17			
				270.000	0064	0216	.0497				
				300.000			.0224	.0869			
		2 <sub>1</sub>		330,000			0249	.0295			
ALPHA ( 3) = 3.960	BETA	(1) =	.000	X/L FHI	.634	.742	.851	.986			
							.0248	-1542			
				30.000		1519		.1383			
·				en .eon		0788	0184	.0551			
				90,000	.0041	0682	0823	.1947			
		· • i		120,000		0156	.2433	. 4333			
•				135-000		0121	.1545	5343			
				1 50 .000		11421	.3798	. 48 54			
				165.000		.0080	.3613	.3117			
*				195.000			-3305	3018			
				210.000	•		.3304	.3/173			
				225.000			.2525	4018			
				240.000	_		.2200	.3478			
				270,000	0176	(1859	1080	1518			
•				300 (000		-	0190	.0484			

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DATE 01 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 (ARC 11-D14)

ARC11-D14TA19 QTS - SRB-OFF MFS-OFF EXT TANK (REUT52)

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA (3) = 3.960 BETA (1) = .000 X/L .634 .742 .851 .986

PHI

330.000 -.0110 .1373



	DATE III MAY 75	TABULATED SOU	RCE PRESSURE D	ATA - TAL	9 ( ARC	11-014				PA	GE 1073
		AR	C11-014TA19 OT	s s	RB-NCM H	IPS-OFF E	XT TANK		(REUT 5	3) (22 0	CT 74 )
	REFERENCE DA	TA						•	PARAMETRIC	DATA	
	SREF = 2690.0000 SQ.FT.		.0000 IN. XT			•		ELV-1B =	.000 000	ELV-OB =	4.000
	LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200		.0000 IN. YT		•			GIMBAL =	1.000	macti =	• 3
	SECTION ( 1) EXTERNAL TANK		DEPENDENT VA	RTABLE CP		•					
	ALPHA ( 1) = -4.179 BETA	(1) =003	X/L	.634	.742	.851	.986		•		
	•		PHI	•							
			.000		===		2899			÷	
			30.000			0211	2948				
			60.000		0822		- C				
			90.000	0469		0009	.1951				
			120,000			0376	.0147				
			135.000			0561	.24@1		$\odot \odot$		
			1 50 .000		.0293	.0854	-1011			•	
			165.000		.0210		1082		Off Poor Quality	_	
			195,000				1526		<b>9</b> 🖟	•	
			210,000		•		0472		2 €		
		•	225,000			0193	.2424		25		
			240,000				0150		ے چے		
	•		270.000	0479	0381		.1804		₽? ??		
		÷	300,000				2026		# G		
			330,000			0246	3172	:			
									7 5		
	ALPHA ( 2) =339 BETA	(1) = -3.997	X/L PHI	. 634	.742	.851	.986		· * 62		
	•		.000			0002					
			30,000		(1962				•		
-			eo . ooo		0500	.0192	2016				
			90.000	0175	.0326	.0471	.1171				
			120,000		.0814	.1353	.1618			•	
			135,000		.0973	.1542	.4928				
			1 50 , 000		-1132	.3012	-3615				
	• .		165,000		.0649	.3529	.1526				
			. 195,000			2094	-10470	· .			
			210.000	•		0415	1338				
			225,000			0169	0703	•			

240.000

270 -000 300 -000

330,000

6HT -.000

30.000

eo.ooo

90.000

120.000

ALPHA (2) = -.380 BETA (2) = .012

-.0511 -.0710

-.0242 -.1977 · -.0161 -.2953

.0232 -.2587

.0065 -.2583

.986

-.0923 -.0997 -.0753 .2714

.851

-.0546 -.0199 -.0022 .2139

.0305 .0345 .0920

.742

-.1267

ARC11-014TA19 OTS

SRB-NOM MPS-OFF EXT TANK

(REUT53)

						•
SECTION ( 1) EXTERNAL TANK	DEPENDENT VARIA	ABLE CP				
LPHA ( 2) =380 BETA ( 2) = .015		. 634	742	.851	.966	
	PHI		D474	0046	.3570	•
	135.000		.0611	.1419	.1443	
	150.000		.0573	.1112	0732	
	165.000		10313	.0993	1147	
	195,000			.1313	.0166	
	210.000			.0372	.3415	
	225,000			.0013	.0668	
	240 .000 270 .000	- 11613	0354		.2161	
	300.000	0012			1795	
· · · · · · · · · · · · · · · · · · ·	330.000				2750	
NLPHA ( 2) =411 BETA ( 3) = 4.02	z X/L	. 634	.742	851	.986	OF OR
(11) ( E) = 1411	PHI					~ ₹
	.000			.0090	2627	ORIGINAL PAGII OF POOR QUALI
	30.000		1337	0052	2669	오턴
	0.000		1094	0271	1998	
	90,000	0837	0742	0874	.2749	~ E
	120,000		.0061	0186	0677	, e
•	135.000		.0074	0370	.0857	Z Š
•	150.000		.0055	.1125	.0923	
	165,000		0165	.0319	0786	
•	195.000			.2268	.1092	
	210.000			.2771	.1532	11 (2022
	225.000			.1835	. 4007	
•	240.000			.1078	.1032	
	270.000	0386	.0242	.0897	.1163	
	300.000			.0381	1745	
	000.088			.0102	2781	
ALPHA (3) = 3.936 BETA (1) =00	6 X/L	634	.742	.851	.986	
•	.000			.0152	2512	
	30.000		1557	0036	- 2593	
	90.000		1150			
•	90.000	0568		0922	.0908	
	120,500		.0435	.0634	.1127	
	135,000		.0678	.0233	4094	
	150.000		.0842	.1702	-1500	
	165.000		.0840	.1330	0683	
• • •	195.000			.1274	-,0968	
	210.000			.1723	.0431	
	225,000			.0767	.3895	
	240.000			.0397	.0759	
	270 -000	0606	0732	0917	.0971	
	300,000			0082		

Same of the last

DATE DI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1075

ARC11-014TA19 OTS

SRB-NON MPS-OFF EXT TANK

.851

(REUT53)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALFHA ( 3) = 3.936 BETA ( 1) = -.006

X/L .634 .742

.986

PHI 330.000

-.0007 -.2763

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ARC11-014TA19 OTS SRB-NCM MPS-OFF EXT. TANK (REUT54) ( 22 OCT 74 )

## REFERENCE DATA

## PARAMETRIC DATA

ELV-IB = 8.000 ELV-CB =

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN.	XMRP = YMRP = ZMRP =	976.0000 .0000 400.0000	IN, YT		•			ELV-IB = RUCCER = GIMBAL =	8.000 EL .000 NA 1.000
SCALE = .0200									
SECTION ( 1) EXTERNAL TANK		DEFE	ENDENT VAR	TABLE CP					
ALFHA ( 1) = -4:149 BETA	(1) =	.000	X/L	. 634	742	.851	.986		
			PHT - 000			.2239	0024		
			30.000		.0371	.2157	.0318		÷
			60.000		0643	.2107	.1543	•	
			90.000	0956	.0709	.2042	. 4030		၁ ဍ
			120.000		.0898	.1681	.1072		南智
· · · · · · · · · · · · · · · · · · ·	•		135.000		.1938	.1655	.3181		14 B
			150,000		.0946	.2461	.2540		2 Z
			165.000		.0898	.2144	.0551		
			195.000			-2946	.0356		S. F.
			210,000			.2139	.1239		20
•			225,000			1740	.31 RJ		H A
			240.000			.1443	.0831		日出
			270.000	0652	.0692	.1964	.3484		目旨
			300,000			.2137	.1575		20
			330.000			-2099	·U1 59		ORIGINAL PAGE IS
ALPHA ( 2) =315 BETA	(1) = -4	.003	X/L	. 634	.742	.851	986		
			PHI .						
			.000			.2138	.0183		
			30.000		0310	.2187	.0235		
			EO .000		.0477	.2413	.0800		
			90.000	.0530	.1631	.2939	.3/111		
•			120,000		.2097	3384	.3371		
			135.000		.2320	.3617	.6357		
			1 50 .000		.2411	.4767	. 5461		•
			165.000		1900	.5235	-3739		
	•		195.000			.3822	.1293		
•			210,000		•	1050	.0444		
			225.000			1679	2170		
•			240.000	•		.1466	.0994		
	•		270.000	0624	.0864	.1814	. 30 61		
			300,000	*		.1787	.0416		
•			330.000			.1979	.0120		
ALPHA ( 2) =327 BETA	(2) =	.006	X/L	. 634	.742	.851	.986		
	-		PHI		_				
			.000			.2178	.0224		
			30.000		0482	2094	.0379		
			60.000		.0043	.2098	.0683		
	•		90.000	0279	.0987	.2456	.2516		
			120.000		.1445	.530.6	.2190	,	



ALPHA (3) = 3.915 BETA (1) = -.003

SRB-NOM MES-OFF EXT TANK ARC11-014TA19 OTS DEPENDENT VARIABLE CP SECTION ( 1) EXTERNAL TANK ALPHA ( 2) = -.327 BETA ( 2) = X/L . 634 .742 .851 .986 PHI .3956 135.000 .1464 .2253 .3046 1 50 .000 .1519 .3113 .1033 165,000 .1473 .2787 195.000 .2568 .0904 210,000 .2646 .1754 .3959 225.000 .2194 240,000 .2007 .1713 270.000 .0897 .2225 .2760 -.021.1.1126 300,000 -2056 330.000 .2010 .0281 ALPHA (2) = -.288 BETA (3) = 4.016 . X/L .742 .851 .986 HI .000 .2116 .0269 30,000 .2010 .0309 .0514 **60.000** .0755 .1764 .0410 .3283 90,000 .0991 .1911 120,000 .1308 .1663 .1135 .1591 .2259 135,000 .1241 150,000 .1122 .2599 .2545 165.000 .0713 .1597 .0143

.3946 .2903 195,000 210,000 .4318 .3716 .3707 .5636 225,000 .3/199 .2818 240.000 .1306 .2933 .3227 270.000 .0406 300,000 .2572 .1212 330,000 .0189 .2187 X/L .986 . 634 .742 .851 PHI .000 .0169 .1847 30.000 .1771 .0130 ÷.0373 .1710 .0231 60,000 .0283 90.000 .0795 .1272 .1688 .2429 .1938 .2738 ,2838 120.000 135,000 .2144 .2606 .4446 150.000 .2227 .3479 .3093 165.000 .2178 .3200 .1196 -3088 .1294 195.000 210:000 .3295 .1969 225,000 .2807 3590 .2217 240,000 .2617 270,000 .0788 .1227 .1576 .2510 300.000 -0400 .1760

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(REUT54)

CATE BI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1078

ARC11-014TA19 OTS SRB-NOM MPS-OFF EXT TANK

(REUT54)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.915 BETA ( 1) = -.003

X/L

.634 .742 .851 .986

PHI 330.000

.1746 .0050



DATE	01	MAY	75

# TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

PAGE 1079

4,000

1.250

ARC11-0:	PILTE	OTS
		9.3

SRB-NOM MES-OFF EXT TANK

(REUT55) ( 22 OCT 74 )

				AT.	

## PARAMETRIC DATA

SREF LREF Bref Scal	=	1290	.0000 .3000 .3000 .0200		XMRP YMRP ZMRP	=	.0000	IN. XT IN. YT IN. ZT			•		ELV-18 = RUDDER = GIMBAL =	8,000 000 1,000	ELV-CB MACH	=======================================
\$EC	TION	(1)	EXTER	VAL TAN	: <b>K</b>	-	DEF	ENCENT V	ARTABLE C	P						
ALPH	λ (:	() =	-3.981	BETA	(1)=	.000	. ·	X/L	634	742	.851	.986				
								PHI		1146	.631	.300	• •			
								.000		•	.0338	.0680			•	
								30.000		1943		.0712			•	
		-						60.000			0324	-0475	•		****	
								90.000	0590	0912		.2722	• •		ORIGINAL PAGE	
								120,000		0657		.2939			~ <u>22</u>	
			•					135,000		0569		.4428			<b>7</b> 2	
								150.000		0231		.3392	•		82	
			- 1		•	¥ .		165.000		0374		-1543		į	$\Xi \bowtie$	
								195,000			-1830	-1098		6	, L	
								210.000			.1801	.1427		Ĉ	i to	
			•					225,000			.0402	.3357		<b>A</b>	? <u>₽</u>	•
f								240.000			.0170	2226		· E	:≌	
•					•			270.000	0700	0958	.0226	.2677	,	i i	(4)	
		•						300.000			0295	.0555		H.	•	
		•						330 .000	_		0182	.0688				
A. 544									•					•		
ALITIA	. ( 2	:) =	369	BEIA	(1) =	-4.000		X/L	- 634	.742	.851	986				
								PHI								
	•					•		.000			-1932	-1977		٠		
					•			30.000		1084	.2:145	-1048		•		
								60.000		()445	-2109	.1271				
٠								90.000	.0347	0127	1917	2994				
								120.000	,	[](199	.3424	5355		•		
								135.000		0334	.3621	.7763				
	-	•			,			150.000		-0503	- 4883	. 6425			* ·	
	٠.							165.000		10050	- 5348	.4731				
						. •		195.000			-3434	.1625	.•		•	
			٠.					210 (000 )	•		.0497	.0275				
								225.000			.0945	1678		•		
			-					240 (000			.0718	1440				
					•			270 .000	1381	1333	0493	3808				
								300 .000			.11879	-1088	•			
			-					330 ,000			.1823	1052			. •	
AL OUA	1 6		***	8574						•		• **				
ALPHA	. 2	.=	309	BETA	(2) =	.012		X/L	. 634	.742	.851	986				
					•			HI ·								
					•			.000			1613	.0859				
								<b>3</b> 0 .000		1887	1 5 50	.0995				
								ea .ooo		1198	.0917	.1052	•			
								90.000	0544	0912	.0359	4031				
							1	20 000		- CO . E	4 5 5 5	77				

120,000

-.0815 .1555 .3344

(REUT55)

•		ARC	11-014TA19 OTS	; S	RB-NOM M	PS-OFF EX	TANK
SECTION (1) EXTERNAL TANK		•	DEPENDENT VAR	TABLE CP			
ALPHA ( 2) =309 BETA (	(2) =	.012	X/L	. 634	.742	.851	.986
•			FHI				
			135.000		0493	.1047	.4667
			150,000		0076	.2917	.3956
			165.000		0188	.2734	.2107
			195,000			.2436	.1656
			210,000			.2419	1991
			225.000			.1583	3770
			240.000			1339	.27/15
			270.000	0.753	1076	.0113	.4298
			300.000			.0790	1092
		•	330,000			.1379	.0922
ALPHA ( 2) =300 BETA	(3) =	4.022	X/L	.634	.742	.851	.986
			.000			.1825	,1038
			39.000		2642	.1732	.0993
			00.000		1930	.0829	.1011
			90.000	1209	1312	0778	. 4368
			120,000		0751	.0687	.1367
			135,000		0557	<b>.</b> 0589	.2271
			150,000		0417	1924	2276
			165.000		0685	.1067	<b>.</b> 9489
			195,000			.3735	.3715
			-210 -000			.4052	,4648
			225.000			.3656	.6628
			240.000			.29(7)	.4639
			270 .000	.0148	0290	.1982	3203
			300,000			.2077	1194
			330 .000			.193,2-	.0890
ALPHA ( 3) = 3.966 BETA (	(1) =	.003	X/L PHI	. 634	.742	.851	.986
			.000			.2499	.0960
			30,000		1860	.2277	.0840
			60.000		1102	2063	.1222
•			Jer 90 .000	0386	0874	.0574	.2874
		المنتر المعار	120.000		0191	.2794	.3770
		••	135.000		.0265	.2768	.4679
			1 50 . 000		.0517	3629	.4039
			165.000	• "	.0601	.3362	.2234
			195.000			.3204	.2168
			210.000			.3205	.2538
			225.000			.2754	.3613
			240,000			2579	.2929
•			270 .000	0657	0909	.0439	. 31 54
			300,000			-2951	.1099

DATE OI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

(REUT 55)

PAGE 1081

ARC11-0141A19 OTS SRB-NOM MESHOFF EXT TANK

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

ALPHA (3) \* 3.966 BETA (1) \* . .003

X/L PHI

330.000

.0751

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•	TABULATED S	core d	SESSIME DAT	A - TA19.	( ARC 1	1-014				₽.	AGE 1082
CATE OI MAY 75	TABULATEU					S-OFF EXT	TANK		(REUTS	6) (-22	OCT 74 ')
		ARC11-0	14TA19 OTS	SRI	R-NTM WI	S-CFF EX	1 17,40				
REFERENCE DA	TA								PARAMETRIC	UAIA	
REI EXERCE SI						•		ELV-IB =	8.000	ELV-CB =	4.000
SREF = 2690.0000 SQ.FT.	XMRP =	976.0000	IN. XT					RUDDER =	.000	MACH =	1.400
LREF = 1290.3000 IN.	YMRP =		IN. YT					GIMBAL =	1.000		
BREF = 1290.3000 IN.	ZMRP =	400.0000	I IN. ZT					ori. Date =			
SCALE = .0200											
SECTION ( 1) EXTERNAL TANK		CEF	ENDENT VAR	IABLE CF							
		100	X/L ·	. 634	.742	.851	.986				
ALPHA ( 1) = -4.071 BETA	(1) = .0	r.r.i	PHI								
			.000			0049	.0080				
			30.000		1455		.0107	·			
			60 .000		0767	0666	.0440				
			90.000	0208	0602	0121	.4546				
			120.000	10,200	0871	.0482	.3464				
			135.000			1082	. 4985				
•			150,000		1088	.2296	.4192		00	<b>5</b>	
			165.000		1346	.2254	.2460		OF POOR	ฮ์	
			195.000			.1877	.1915		<b>₩</b>	₹	
			210.000			.1864	.1959		ÖĒ	<del>-</del>	
			225.000			.0929	.3347		Ŏ.	Ź	
			240.000			.0599	.2744		₩ #	- -1	
		*	270.000	0805	0865	0092	.4623		ောင်		
			300.000			0575	.0477		ŢŢ,	7	
			330.000			0437	.0017		≥ 5	5	
									POOR QUALITY	<del>j</del>	
AL FHA ( 2) =294 BETA	(1) = -4.	กกา	X/L	. 634	.742	.851	.986			- -	
ALPHA ( 2) =294 BETA	. ( 1) = 4.	-11,12	FHI.						<b>⊢</b>	Ò	
			.009			0009	.0505				
	•		30 .000		0724	0263	.0400				
	100		60.000		0087	.0276	.0865	i			
•			90.000	.0126	.0036	.0916	.2935	i			
			120.000		.0198	.2306	. 6001				
			135.000		0046	.1880	.7468	<b>!</b> .			
			150.000		0171	.4243	. 6683			•	
			165.000		.0357	.4779	.5323				•
	•		195.000			.2874	.2371				
	•		210,000			.0826	.068				
			225.000			.1078	1907				
•			240.000			.0828	.2023		•		
		•	270,000	-,0956	1138	1156	.248			*	
			300.000	-		1134	.0568				•
			370 000			0387	.050	7			

330.000

XZL

FHI

.000

30.000

60.000

90,000

120.000

-.9387

-.0036

-.1503 -.0384

-.0846 -.0545

-.0466 .1571

.742

-.0255 -.0552 -.0126

.0537

.985

.0278

.0428

.0511

.3441

. 41 62



ALPHA ( 2) = -.375 BETA ( 2) = .009

ARC11-014TA19 OTS

SRB-NOM MPS-OFF EXT TANK

(REUT56)

SECTION ( 1) EXT	TERNAL TANK	•	DEPENDENT VA	RIABLE C	•	•			
ALPHA ( 2) = -	.375 BETA	(8) = (009	X/L PHI	. 634	. 742	.851	.986		
			135.000		0607	0352	. 5361		
			1 50 .000		0908	.2970	.4606		
			165.000		1129	.2887	.2834		
· ·	• •		195.000			.2460	2441		
	.*	*	210.000			2463	.2445		
		4	225.000			.1745	3706		
			240 -000			-1435	3072		
•			270.000	0620	0813		.3717		
			300.000			0528	.0643		
			330 .000			<b>~.</b> Ω365	.0361		
ALPHA ( 2) = -	423 BETA	(3) = 4.028	X/L FHI	634	.742	.851	.986		
			.000	*		0048	.0518		
			30.000			0391	.0501		
	*		60.000		1432		.0519		
			90.000	0612		1100	.2910		
			120.000	11.012	1017		.1947		
			135.000		1112	1049	2675		
			150.000		1457	-2114	.2626		
			165.000		- 1826	.1425	.1405		
	•		195.000			.2827	4030		
			210.000			.3189	4535		
	•		225.000			-2715	5848		
			240.000			-1562	. 5711		
	,		270.000	0096	0215	.0427	.3026		
4			300,000			.0177	.0895		
			330.000			0279	0314		
ALPHA ( 3) = 3.	834 BETA	(1) =003	X/L FHI	.634	. 742	-851	.986		
	*		.000			.0232	.1559		
. *			30.000		1503	0162	.1436		
			60.000		0851	0301	.0614		
			99.000	0019	0744	0874	.1982		
			120,000		0205	.2410	.4317		
			135,000		0173	.1573	. 5341		
			150.000	•	0526	.3785	.4853		
			165,000		0044	-3601	3063		
		•	195,000			.3287	3003		
			210.000			.3251	3/163		
			225.000			2503	4002		
	٠		240,000			.2216	.3443		
			270.000	0219	0902	1141	.1496		
			300,000			0293	.0513		

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DATE D1 MAY 75 TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

PAGE 1084

ARC11-0141A19 OTS SRB-NOM MPS-OFF EXT TANK

(REUT 56)

SECTION ( 1) EXTERNAL TANK DEFENDENT VARIABLE CP

ALPHA ( 3) = 3.834 BETA ( 1) = -.003

X/L .634 .742 .851 .986 PHI . 330.000

-.0159 .1396

DATE O1 MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1085

4.000

1.250

ARC11-0141A19 OTS+STRUT SRB-WENTHES-WENTEXT TANK

(REUTS7) ( 22 OCT 74 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

# PARAMETRIC DATA

ELV-IB =

8.000 ELV-08 =

SREF = 2690.0000 SQ.FT. XMRP = 976.00	OO IN, XT					FT A-1D =		MACH =
IRFF = 1290.3000 IN. YMRF = .00	DO IN. YT					RUDDER =		
BREF = 1290.3000 IN. ZMRP = 400.00	oo in. ZT					GIMBAL =	1.000	
SCALE = .0200		•						
SECTION ( 1) EXTERNAL TANK	EFENCENT VAR	IABLE CP						
DOTAL (A) = DOT	X/L	. 634	.742	.851	.986			
ALPHA ( 1) = -4.497 BETA ( 1) = .003	PHI							
	.000			.0477	.0626			
	30,000.		1963	.0026	.0467			
	60,000		1247	0228	.0404		•	
	90.000	0597		.0369	.2679			_
	120,000		0618	.0276	.2542			್ಲಿ ಲ
	135.000		0613	0225	.4931			
	150.000		0744	.1786	.3291			~ Z &
	165,000		1961	.1581	.1322			8⊘
	195,000			.0769	.0356			$\bowtie$
	210.000			.1286	.1400			2 [
	225,000	•		0580	.3498			T TO
	240.000			0370	.2009			A A
	270.000	0664	0902	-0155	.2517			22
	300,000	•		0282	.0679			H
	330 000			0050	.0537			ORIGINAL PAGE IS OF POOR QUALITY
•								
ALFHA ( 2) =339 BETA ( 1) = -3.997	X/L	. 634	.742	.851	.98€			
	<del>[H</del> I				2054			
•	.000			.1857	.0951			
	30.000		0945	1863	.0585			•
	en .000		0193	.2136	.0956			
	90.000	.0417	.0171	.1329	.3374			
	120,000		.0905	.3474	. 4861			
	135,000		.0981	3309	. 6383			
•	1,50,000		.0971	.4445	. 5804			
	165.000		.0075	.4194	.3943			
	195,000			0184	0929			
	- 210 -000			.0002	0112			
	225,000			0711	.2742			*
	240.000			1169	.1681			•
	270 .000	1335	2164	.01 50	.3808			
	300,000			.0909	.0803			
	330.000			.1866	.089	i		
ALPHA (2) =465 BETA (2) = .019	X/L	. 634	.742	.851	.986			
	(H)							
	.000	•		.1797				
	30,000		1888	.1926	.070			
	60 1000		1250	.1144				
	90.000	0537	1054	.0648	4221			
			0.000	2010	3070	1		

120,000

-.0680 .1616 .3239

ARC11-014TA19 OTS+STRUT SRB-NOH+MPS-NOH+EXT TANK

(REUT57)

SECTION ( 1) EXTERNAL TANK	DEPENDENT VARIABLE CP				
ALPHA ( 2) =465 BETA ( 2) = .019	X/L PHI	634	.742	8 51	.986
	135,000		0472	.1278	.4917
	150,000		0624	.2598	.3900
	165.000		1812	.2295	.1826
	195.000			-1580	.0961
	210.000			.1989	-2059
	225,000			-1115	.4136
	240.000			+1010	2641
	270.000	0645	1000	.0368	.4545
	399,000			.1069	1040
	330.000			1886	.0786
ALPHA ( 2) =435 BETA ( 3) = 4.031	X/L PHI	. 634	.742	.851	.985
	.000			.1763	.0978
	30,000		2683	.1722	.0780
	60.000		2207	.0907	.0607
	90.000	1113	2428	0059	• <b>33</b> 80
	120,000		2037	1202	1442
	135,000		1413	- 1443	.1850
	1 50 .000		−.13सा	0525	.0184
	165.000		1649	0893	1044
	195.000			3653	.3929
•	210,000			3814	3665
	225.000			.3/179	.5154
	240,000			.2838	3954
	270.000	.0349	.0228	1222	.3317
	300.000			.2071	.1162
	330.000			.1753	.0654
ALPHA ( 3) = 3.636 BETA ( 1) = .003	X/L FHI	. 634	.742	.851	.986
	-000			.2488	.0968
	30.000		1851	.2253	.0580
	60.000		1107	.2073	.0994
	90.000	0315	1134	.0984	.341B
	120,000		0491	.2762	.3804
	135,000		0155	.2758	.4757
	1 50 ,000		~.0565	.3380	.4242
	165.000		1536	30 59	.2189
•	195.000			.2391	.1453
*	210.000			.2764	.2517
	225.000			.2437	-4145
	249.090			.2277	.2883
	270 .000	0631	1140		.3496
	300,000			.2023	.1155

DATE OI MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1087

ARC11-8141A19 OTS+STRUT SRB-NOM+MPS-NOM+EXT TANK

(REUT57)

SECTION ( 1) EXTERNAL TANK

DEFENDENT VARIABLE CP

ALPHA ( 3) = 3.636 BETA ( 1) = .003

X/L PHI

.634 .742 .851

330.000

.2210 .0683

# ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM EXT TANK

(REUT58) ( 22 OCT 74 )

# REFERENCE DATA

## PARAMETRIC DATA

					976.0000 IN. XT		ELV-IB = RUDCER =	000.8 000.	ELV-CB =	1.400
LREF	=	1290.3000 IN.	YMRP		.0000 IN. YT	A Committee of the Comm	GIMBAL =	1,000		
		1298.3000 IN.	ZMRP	7	400.0000 IN. ZT		UITEAL O	• • • • • • • • • • • • • • • • • • • •		

SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK	DEI-ENDENI TAK	INDICE C.			
ALPHA ( 1) = -4.155 BETA ( 1) = .000	X/L	. 634	.742	.851	.986
•	FH I			0000	.0075
	-000			0028	0034
	30,000		1447	0485	
	en .(xxx		0762	0729	.0280
•	00.00	0251	0580	0116	. 4831
	120,000		0474	.0098	.2870
	135,000		0841	0854	4535.
•	150.000		1229	.1844	.4026
	165.000		1275	.1645	.2145 .1019
,	195.000			.0848	.1829
	210.000			0530	.3573
	225.000				.2584
	240.000		(274)2	0117	.4894
	270,000	0788	0710	0495 0691	.0455
	300.000			0485	0030
•	330.000			- 101403	
ALPHA (2) =342 BETA (1) = 4.028	X/L	. 634	.742	.851	.986
	FH I				
	.000			0020	.0428
	30.000		2113	0550	.0337
	60,000		1493	1551	.0155
	90.000	0627	1609	0895	.2891
	129,000		1915	0530	.1920
	135,000		1968	1192	.1985
•	1 50 ,000		-,2107	.0201	.1066
•	165,000		2895	0195	0390
	195,000			-3319	.4488
•	210,000			.3505	.3955
	225.000			.2691	4390
	249,000	•		.2401	.4101
	270.000	(000)4	0028	0425	.2395
	300.000			.0218	.0539
	330.000			0231	.0055
•					

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# ARC11-014TA19 OTS+STRUT SRB-NOM MPS-CFF EXT TANK (REUT59) ( 22 CCT 74 )

٥	FF	CD	FN	re	DA'	T A

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT

## PARAMETRIC DATA

8.000 ELV-CB =

ELV-IB =

LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	YMRP = ZMRP =	.0000 IN. YT 400.0000 IN. ZT					RUCCER = GIMBAL =	.000 M
SECTION ( 1) EXTERNAL TAN	<b>(</b>	DEPENDENT V	ARTABLE C	P				
ALPHA ( 1) = -4.080 BETA	0. = (1)	12 X/L FHI	. 634	. 742	-051	.986		
		.000			.0269	.0687		
•		30.000		1923	0192	.ດເອດ		
		60.000		1193	- 0364	.0365		
		90.000	000	11975	.0280	-2735		_
		120.000		0674	.0329	.2660		20
•		1351000		0647	0178	4133		7.2
		1 50 .000	• .	~.0655	.1872	.3410		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
		165,000		1966	.1673	.1471		SZ.
		195.000			.0908	.0559		₹ ₹
		210.000			1340	.1484		$\mathfrak{S}_{L}$
		225.000			0437	3542		77.0
		240.000			0242	-2113		A A
		270.000	0651	0908	.0125	.2623		
		300.000			0421	·13619		
		330.000			0235	-0657		ORIGINAL PAGE IS OF POOR QUALITY
ALFHA ( 2) =375 BETA	(1) = .01	2 X/L	. 634	742	.851	.986		
•		.000			.1779	.0891		
		30.000		1851	.1687	0904		•
•		60.000		1183	.0982	.0898		
		90.000	0557	1059	.0503	4218		
		120,000		0689	.1681	.3268		
		135,000		0464	.1362	.4961		
		1,50,000		0475	2683	.3965		
		165,000		1789	.2399	.1973		
		195.000			1642	.1102		
		210.000			.2000	.2192		
		225,000			.1129	. 4271	2	
:		240,000			.1071	.2766		
		270.000	0654	1072	.0269	.4559		
and the second second		900,000			.0865	-1175		
		330.000			.1482	.0927		
ALPHA ( 2) =333 BETA	(2) = 4.03	i X/L FHI	.634	.742	.851	.986		
		.000			.1665	.0973		
		30.000		2620	.1 51.8	.0792		
		60.000		2130	0682	.0612		
						OI E		

120,000

90.000 -.1102 -.2452 -.0163 .3481

-.2214 -.1170 .1577

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF EXT TANK

(REUT 59)

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CF

ALPHA	(2)	=333	BETA	(5) =	4.031	X/L	. 634	.742	.851	.986
						FHI	•			
						135,000		1560	1408	.1888
						150,000		1494	0359	.0318
	_					165,000		1701	0746	0988
						195.000			.3523	.3807
						210,000			.3726	.3673
						225.000			2963	.5012
						240.000			.2739	• 39 50
						270,000	.0324	.0161	.0840	•3250
						300.000			.2038	.1159
						330,000			.1851	.0688

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# TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

120,000

135,000.

150.000 165.000

195.000

210,000

225.000 240.000

270,000

300.000

330,000

- PAGE 1091

ARC11-0141A19 OTS+STRUT SRB-HI MPS-NOM EXT TANK

(REUTED) ( 22 OCT 74 )

#### REFERENCE DATA

## PARAMETRIC DATA

			•	
SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN.	XMRP = 976.0000 IN. XT YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT	RUE		-08 = 4.000 H = 1.250
SCALE = .0200				
SECTION ( 1) EXTERNAL TANK	DEPENDENT VARIABLE CP			
ALPHA ( 1) = -4.122 BETA	(1) = .012 X/L .634 .742	.851 .986		
	.000	.0189 .0693	•	
	30.000187	60308 .0605	•	
	60.000116	40390 .0396		
	90.0000574092	2 .0293 .2711		<b>~</b>

-.0599

-.0613

-.0605

-.1961

-.0656 -.0895

- .0357

-.0166

.1902

1694

.0861

.1309

-.0470

-.0274

.0078

-.0426

-.0302

OF POOR OF PACE IS

.2708 .

.4235

.3598

.1592

.0112

.1416

.3538

.2112

.2601

.0643

.0673

ARC11-0141A19 075+57RUT 5RB-07F WG-0FF BDFLAF U (REUED1) ( 04 FEB 75 )

#### REFERENCE DATA

SREE = 2690.0000 SQ.FT. XYRP = 976.0000 IN. XT יאף ב 1293.3000 TN. און בפספר. ב פור און בפספר. און בפספר. ZBRP = 400.0000 IN. ZT 99E" = 1299.3000 IV.

SCALE =

SECTION ( 1) BODY FLAF UPPER DEPENDENT VARIABLE CF

≂HI.

XO 31.100 31.800 ALPHA (1) = -3.993 BETA (1) = .000 **FHI** .000 -.2365 -.2456 320.000 -.2378 -.2437 31 100 31 800 XO ALPHA (2)  $\pm$  -.216 BETA (1) = -4.996 ngo -.2529 -.2699 320.000 -.2507 -.2574 31.100 31.800 ΧϽ ALPHA (2) = -.336 BETA (2) = .936PHI

 $AUPHA_{1}(2) = -.222$  SETA (3) = 4.925

,000 -.2383 -.2511 329,000 -.2480 -.2535

ALPHA ( 3) = 3.948 BETA ( 1) = .000

¢4I. .000 -.2005 -.2174 320,990 -.2154 -.2152

31.100 31.800

.000 -.2172 -.2240 320,000 -.2262 -.2274 XD 31.100 31.899

PARAMETRIC DATA

= 8C-V\_13 000.e ELV-IB = .DDD MACH = .900 RUCCER = GIMBAL = 1.000

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AGE	11	193

DATE 05 MAY 75 TABULATED STUTCE PRESSURE DATA - 1419 ( ARC 11-014 )

ARCIS-DIATAS OTS+STRUT SRB-JFF MFS-JFF BUFLAR U

(REUED2) ( D4 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT YMRF = 9999 IN. YT LREF = 1290.3000 IN. BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200

#### SECTION ( 1) BODY FLAR UPPER

#### DEPENDENT VARIABLE CP

ALFHA ( 1) = -4.176 BETA ( 1) = .000 ΧD 31,100 31,800 PHI .nnn -.3636 -.3696 329.000 -.3667 -.3677 31.199 31.899  $ALPHA_{(2)} = -.294 BETA_{(1)} = -4.003$ ΧO PHI .000 -.4110 -.4156 320.000 -.4151 -.4159 31,100 31,800 ALPHA (2) = -.252 BETA (2) = .009CX PHI .000 -.3617 -.3677 320.000 -.3632 -.3554 CX 31,199 31,899 ALPHA ( 2) = -.225 BETA ( 3) = 4.928FHI .000 -.4162 -.4204 320.000 --.4196 -.4208 31.100 31.900 ALPHA (3) = 4.026 BETA (1) = .000 XΌ CHI .000 -.3979 -.3947 320.000 -.3910 -.3906

#### PARAMETRIC DATA

8,000 ELV-08 = ELV-IB = MACH = 1.100 .ססס F FBCCUF GIMBA\_ = 1.000

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ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF BDFLAP U

31,100 31,800

.000 -.3361 -.3394 320.000 -.3374 -.3381

XD IH9 (REUE03) ( 04 FEB 75 )

## REFERENCE DATA

ALPHA ( 3) = 3.843 BETA ( 1) = .003

SREF	=	2690.0000	50.FT.	XMRP	=	976.0000	IN.	XT
LREF	=	1290.3000	PM.	YMRP	=	פפפס.	IN.	YT
BREF	Ξ	1290.3000	IN.	ZMRF	=	400.0000	IN.	21
STALE.		Dana						

SECTION ( 1) BODY FLAP UPPER DEPENDENT VARIABLE C

SECTION ( 1) BODY FLAP UPPER	DEPENDENT VARIABLE CP
ALFHA ( 1) = -4.182 BETA ( 1) = .903	XO 31.199 31.899
	.00030913128
	320.00030813099
ALPHA (2) =291 BETA (1) = -3.997	XO 31.199 31.899
	.000 ~.3448 ~.3459
	320.00034573475
ALPHA (2) =177 BETA (2) = .016	%5 31.100 31.800 PHI
	.00030973144
	329.00031163141
ALPHA (2) =366 BETA (3) = 4.931	XO 31.100 31.890 PHI
	.00034713505
	320.00035033511

## PARAMETRIC DATA

ELV-IB =	8.000	ELV-08 =	4.000
RUDDER =	.000	.MACH =	1.250
GIMBAL =	1.999		



DATE OS MAY 7	DAY	ΤE	93	MAY	7:
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# TABULATED SOURCE PRESSURE DATA - TAIR ( ARC 11-014 )

FAGE 1095

1,400

ARCII-DIATAIS DIS+STRUT SRB-DFF MES-DFF BDFLAF U

(QEUED4) ( D4 FEB 75 )

## REFERENCE DATA

# FARAMETRIC DATA

1.000

ELV-IB = RUDDER = GIMBA\_ =

<u>_</u> qEF	=======================================	1290 1290	. 2000 . 2002	In.	YMEP	=	976.000 .000 400.000	יאו פו.	YT		
SECTI	ŀÇΝ	(1)!	3 YOCE	LAP UPP	ER		פס	PENDEN	T VARIAB	E CI	3
ALPHA	( :	1) =	-3.906	S BETA	(1)=	:	.009	X⊃ ≅HI	31 •	100	31.800
									1 1 2		
ALPHA	1 2	2) =	204	BETA	(1) =	-4	.000	ХЭ <b>Р</b> Н <b>Т</b>	31.	199	31.899
									000 000		
ALPHA	( 2	2) =	396	BETA	(2) =		.916	CX IHF	31.	100	31.800
									0002 0002		
ALFHA	( 2	2) =	267	BETA	( 3) =	4	.931	XO FHI	31 . :	100	31.800
									2 2, 000		
ALPHA	( 3	3) =	4.392	BETA	( 1) =		.012	XD FHI		ספו	31.800
									0002 0002		

DATE	23	444	7

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1996

ARC11-014TA19 DTS+STRUT SRB-NOM MES-NOM BDFLAF U

.000 -.3460 -.3859 320.000 -.4012 -.4443 (REUEDS) ( D4 FEB 75 )

## REFERENCE DATA

LREF BREF	= 2690.0000 Sq.FT. = 1290.3000 IN. = 1290.3000 IN. = .0200	YMRF = .0000	IN. YT
SECT	ION ( 1)800Y FLAP UPPE	R DEPE	NDENT VARIABLE CF
ALFHA	( 1) = -4.119 BETA	(4) =006	XO 31.100 31.800 PHI
		e <sup>1</sup> .	.99937484271 329.99945755913
ALPHA	(2) =306 BETA		XO 31.100 31.800 PHI
			.00043154782 320.00051305420
ALPHA	( 2) =264 BETA (		XO 31.190 31.899 PHI
		3	.00035594105 20.00043344874
ALPHA	( 2) =348 BETA (		XO 31.100 31.950 대
			.00041155033 20.00045305450
AUPHA	( 3) = 3.924 BETA (		CO8.15 CO1.15 CX

# FARAMETRIC DATA

ELV-IB = 8.000 ELV-DB = 4.000 QUODER = .000 MACH = .900 GIMBAL = 1.000

ORIGINAL PAGE IS OF POOR QUALITY

٦	A.T	•	73	414	7.

# TABULATED SOURCE PRESSURE DATA - IA19 ( AGC 11-014 )

FAGE 1097

# ARC11-014TA19 OTS+STQUT SRB-NOW MES-NOW BDELAR U

(REUED6) ( D4 FEB 75 )

# REFERENCE DATA

SPEE	ŧ	2590.0000	SQ.FT.	XYRE	=	2000.976	IN.	XT	
्ष्ट्	=	1290.3000	IN.	17£5;=	=	בפפפ.	IN.	YT	
Bie	7	1290.3000	IN.	ZHRE	=	400,0000	IN.	ZT	
SCALE	Ξ	.0200							

# PARAMETRIC DATA

ELV-18 =	9.000	8C-V_12	=	4.000
F PECCUP	.000	4404	=	1.100
GIMBAL =	1.000			•

SECTION ( 1) BODY FLAP UPPER	DEPENDENT VA	RIABLE CP
ALPHA (1) = -4.074 9574 (1) =	ск <b>есо.</b> Тна	31.100 31.800
•	.000	45694959
	320.000	-,4723 -,5046
ALPHA ( 2) =396 BETA ( 1) = -4	.003 KD	31.100 31.800
	• •	50815550
		52925597
•	3501430	-, 1276 -, 13791
ALPHA ( 2) =408 BETA ( 2) =	.cx ecc.	31.100 31.800
	PHI	•
	.000	45214979
	320,000	46825083
ALPHA (2) =339 BETA (3) = 4	CX est.	31.100 31.800
		51955527
		52975695
•		
ALPHA ( 3) = 3.984, BETA ( 1) =	.003 XO	31.100 31.800
	PHI	,
	.000	47815289
	320.000	48495249

OF THE POLICE TO 
ARC11-D14IA19 OTS+STRUT SRB-NOM MPS-NOM BDFLAF U

(REUED7) ( D4 FEB 75 )

## REFERENCE DATA

FARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRP = 976.0000 IN. XT YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT		RUDDER =	8.000 ELV-08 = 4.999 .000 MACH = 1.259 1.000
SECTION ( 1) BODY FLAR UPP	FER DEFENDENT VA	RIABLE CF		
ALPHA ( 1) = -4.131 BETA	CX	31,199 31,899		
	.000 .000.038	33993704 34993751		
ALPHA ( 2) =300 BETA	XX 000.4- = (1)	31,100 31,800		
	.000. 000.0 <b>55</b>	37624098 39224021		
ALPHA ( 2) =411 BETA	CX 210. = (2)	31.100 31.800		
	000. 000.055	35153797 34973730	OF OF	
ALPHA ( 2) =438 BETA	(3) = 4.031 XO PHI	31,100 31,800	ORIGINAL OF POOR Q	
	.000 320.003	37674173 37344103	ORIGINAL PAGE IS OF POOR QUALITY	·
ALPHA ( 3) = 3.582 BETA	CX E00, = (1)	31.199 31.899	JACI JALI	
	.000 320.000	37224934 36353913	ALL SI E	

PAGE 1099

4.000

1.400

## U 9AJECH MCH-29M MCH-BPR TURTE+2TC PLATFIC-113PA

(REUED8) ( 04 FEB 75 )

MACH =

FARAMETRIC DATA

.000

1.000

e 80-VJ3 000.8

			REFE	INCE DA	LTA .								
LREF	=	1290 1290	.3000	in. tn.	Y <b>भ</b> र्ह	=		מפפפ.	IN. XT IN. YT IN. ZT		·		ELV-IB = RUDDER = GIMBAL =
SECT	I ON	(1)	BODY F	LAF UFF	ER			DEF	ENDENT V	RIABLE C	p.		•
ALPHA	( :	1) =	-4.017	BETA	(1)	<b>=</b> ,	900.		CX FHI ccc. ccc.cst	2522	2768		
ALFHA	( :	2) =	486	BETA	( 1)	= ,-4 .	999	•	CX) FHI CCC.	2880	31.800 3167 2982		PROPERTY OF THE PROPERTY OF TH
ALPHA		2) =	438	BETA	(2) :	: .	Ø16		CX IH9 eee. eee.ess	2664			
ALPHA.	( 2	?) =	456	BETA	(3):	= 4.	928			31.190 2792 2739		· \$7	
ALFHA	( 3	3) =	4.014	<del>SE</del> TA	(1):	٠.	909		CX IHR	31.199			

320.000 -.2735 -.2915

DAT	FOT	 v 74

# TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

FAGE 1100

4.000 .900

ARC11-0141A19 OTS+STRUT SRB-LOW MRS-WOM BDFLAR U (REUED9) ( 04 FEB 75 )

## REFERENCE DATA

## FARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 976. LREF = 1290.3000 N. YMRP = . BREF = 1290.3000 N. ZMRP = 400. SCALE = .0200		ELV-IB = ELV-IB =	8.000 ELV-08 = .000 ACH = 1.000
SECTION ( 1)BODY FLAR UPPER	DEPENDENT VARIABLE CP		
ALPHA (1) = -4.19% BETA (1) = .000	XD 31.100 31.800		
	.00039524609 320.00047795271	_	•
ALPHA (2) =438 9ETA (1) = -4.000	XO 31.100 31.800 THI	OF H	
	.00041794655 320.00054755813	ORIGINAL PAGE IS OF POOR QUALITY	
ALPHA (2) =525 BETA (2) =593	COR.15 CO1.15 CX	710 74 T	
	.000 ~.3521 ~.4022 320.000 ~.4381 ~.4662	ALITA	
ALPHA (2) =441 BETA (3) = 4.025	XD 31.100 31.800 PHI	Y IS	
	.00042425001 320.00049185290		
ALPHA (3) = 4.050 BETA (1) = .006	XO 31.100 31.800 FHI		
	.00034453997 320.00042014738		

	_			
- D.Y	TF	ייני	MAY	-75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1101

4.000

1.100

# ARCII-014IA19 OTS+STRUT SRB-LOW MES-NOW BDELAS U-

(REUE10) ( 04 FEB 75 )

## REFERENCE DATA

STEF = 2690.0000 \$0.FT. XYRF = 976.0000 IN. XT

# PARAMETRIC DATA

9.000

.000 000.1

745. T 5030'0000 46W I		
19EF = 1290.3000 TN.	YMRF = 9999 IN. YT	
955F = 1290.3000 in.	ZMRP = 400.0000 IN. ZT	
3CALE = .0200		
SECTION ( 1)BODY FLAP (	PPER DEPENDENT VA	RIABLE CP
ALPHA ( 1) = -3.978 BET	$CX = \frac{300.+}{100} = (1) A^{\circ}$	31.199 31.899
	· •	47915199
		48515216
ALPHA ( 2) = -,387 BET	rA (1) = -4.993 XO PHI	31.100 31.800
the state of the s	.000	52715677
		54455753
ALFHA ( 2) =429 BE	CX	31.100 31.800
	.000	47545145
	320,500	48245184
ALPHA ( 2) =384 BET	7A (3) = 4.928 XD 341	31.100 31.800
	.999	51785646
	320.999	54135798
ALPHA ( 3) = 3,930 SE	CX 000. = (1) AT	31.100 31.800
	.000	50375423
	320,000	-,50295359

OF POOR QUALITY

ELV-IB = RUDDER = GIMBAL =

FAGE 1102

4.000

ARC11-8141A19 OTS+STRUT SRB-LOW MPS-MOM BOFLAF U

(REUESS) ( 04 FEB 75 )

ELV-08 =

## REFERENCE DATA

# PARAMETRIC DATA

REF = 2690,0000 50.FT. LREF = 1290,3000 IN. BREF = 1290,3000 IN. SCALE = .0200	YMRF = .0000 IN. YT ZMRF = 400.0000 IN. ZT	$0.00.6 = 81 - V_{\perp} J_{\parallel}$ $0.000. = 8200 U_{\parallel}$ $0.000. 2 = 1.00$
SECTION ( 1)BODY PLAP UPP	ER DEFENDENT VARIABLE CF	
ALPHA ( 1) = -4.740 BETA	(1) = .006 XO 31.100 31.800 FHI	
	7,3907 - 3636 - 3697 320,000 - 3665 - 3679	
	353,333 -13003 -13013	
ALPHA ( 2) =444 BETA	(1) = -4.990 XO 31.190 31.899 PHI	OF OF
•	.09038324296	
	320,00039364177	O N
ALPHA ( 2) =402 BETA	CC8.1E CC1.1E CX S1C. = (S)	ORIGINAL PAGE IS
	.00037624933	E P
	320,00037153909	AGI
ALPHA ( 2) =324 BETA	(3) = 4.034 XO 31.100 31.800 HI	ALI SI E
	.00039204235	-
	320.99938574125	
ALPHA ( 3) = 3.552 9ETA	008.15 001.15 CX 500. = (1)	
	.00038774184	
	320,99037964991	

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,,,			71	7.2

# TABULATED SOURCE PRESSURE DATA - TAIS ( ARC 11-014 )

PAGE 1103

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AYLITOTITATATA	OTELETOIIT	SRB-1 OW MES-NOW ROPLAR U	

(REUE12) ( 04 FEB 75 )

# REFERENCE DATA .

SREF = 2690.0000 SQ.FT. XWRP = 976.0000 IN. XT

# PARAMETRIC DATA

LREF = 1290.3000 IN. YMRF = .0000 IN. YT  SQEF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT  SCALE = .0200  SECTION ( 1)BJOY FLAF UPPER DEPENDENT VARIABLE CF  ALPHA ( 1) = -4.12% BETA ( 1) = .000 XD 31.100 31.800  PHI .000028443030 320.000028132957  ALPHA ( 2) =396 BETA ( 1) = -4.003 XD 31.100 31.800  PHI .000030453259 320.000030013146
SCALE = .0200  SECTION ( 1)BJOY PLAF UPPER DEPENDENT VARIABLE CF  ALPHA ( 1) = -4.12% SETA ( 1) = .000
ALPHA (1) = -4.128 SETA (1) = .000 XD 31.800 FHT
ALPHA (1) = -4.128 SETA (1) = .000 XD 31.800 FHT
PHI .00028443030 320.00028132957  ALDHA (2) =396 BETA (1) = -4.003 XO 31.100 31.800 PHI .00030433259
320.00028132957 ALBHA (2) =396 BETA (1) = -4.003
ALPHA (2) =396 BETA (1) = -4.003 XO 31.100 31.800 PHI .00030433259
PHI .00030433259
•
329,900 -,3001 -,3146
N Buck A Bt
008.15 001.15 CK 800. = (2) ATBE 875 E (2) AHG_A
PHI .
00029183090
320,00028252941
ALPHA (2) =315 SETA (3) = 4.025 XO 31.100 31.800 PHI
.00030363219
329.99929773198
ALCUA ( T) - A COT OPPL ( A) - COO
ALPHA (3) = 4.005 BTA (1) = .000 XO 31.100 31.800
FHI
.00029903217
320.00029333071

ELV-18 = 8.000 ELV-08 = 4.000 RUCCER = .000 MACM = 1.400 GIMBAL = 1.000

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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1104

ARC11-014TA19 OTS+STRUT SRB-NON MES-OFF BOFLAR U

(REUE13) ( D4 FEB 75 )

# REFERENCE DATA

# PARAMETRIC DATA

							E: V-18 =	8.000	ELV-OB =	4.000
SREF	=	2690.0000 \$q.FT.	XMRF	=	976.9990 IN.	XT	RUDDER =	.000	MACH =	.900
LREF.	=	1290.3000 th.	YMRP	=	.אז פפפפ.	ΥT			MACO -	. 3
		ואל פפפנ. פפני	ZMRF	=	400.0000 IN.	ZT	GIMBAL =	1.000		
SCALE	=	.0200							•	

## SECTION ( 1) BODY PLAN UPPER

# DEPENDENT VARIABLE CF

SECTION ( 1) DON'T LEVE OFFER	SCI CISCIII INICIISCE C
ALPHA ( 1) = -4.119 BETA ( 1) =003	CO8.1E CO1.1E CX
	.00025122687
	320.00025502717
ALPHA (2) =395 BETA (1) = -3.997	XO 31.100 31.800 PHT
	.00026342722
	320.00026022777
ALPHA ( 2) =378 BETA ( 2) = .016	XO 31.190 31.899 THT
	.00022772329
	320.00023182335
ALPHA ( 2) =327 BETA ( 3) = 4.028	XO 31.100 31.800 FH1
	.00024292771
	320.00025582794
ALPHA ( 3) = 3.909 BETA ( 1) = .000	XO 31.100 31.800 PHI
	.00022392280 320.00023062298

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# TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1195

4.000

1,100

# ARCTI-DIATATE OTS+STRUT SRB-NOM MES-OFF BOFLAF U

(REUE14) ( 04 FEB 75 )

## REFERENCE DATA

# PARAMETRIC DATA

.000 000.1

ELY-IB =

RUDDER = GIMBAL =

8.000 ELV-08 =

LREF BREF SCALE	=======================================	1299	3.0000 Sc 3.3000 Ti 3.3000 Ti .0200	N. ;	YMRF ZMRF		= 499	.9999 .9999	IN. YT		**************************************
ALPHA	(	1) =	-5.142	BETA	(1)	=	- ,996		_	31.193	31.899
									PHI		
										93449	
									320.00	o3459	3475
ALPHA	(	2) .=	321	BETA	(1)	=	-4.993		CX IHq	31.100	31.800
									.99	n3824	3891
			••						320.00	3854	3871
ALPHA	, (,	2) =	432	BETA	( 2)	=	.016		XO THT	31.199	31.893
									.00	0 - 3342	3425
									320.00	.3358 - D	3378
ALPHA	(	2) =	396	BETA	( 3)	=	4.025		XO PHI	31.100	31.890
									.92	03847	3900
									320.00	3869	3997
ALPHA	(	3) =	3.864	BETA	( 1)	=	.993		XO PHI	31.199	31.890
									.00	733594	3670
									329.99	98.5 - DC	3618

1.250

ARC11-D14TA19 OTS+STRUT SRB-NOW MES-OFF BDFLAF U

(REUE15) ( 04 FEB 75 )

## REFERENCE DATA

# PARAMETRIC DATA

.000 MACH =

8.999

1.000

ELV-IB = RUDDER = GIMBAL =

LREF BREF SCALE	= 129 = 129 =	. 2006. 26 2006. 26 2020.	IN. IN.	YMRF = ZMRF =	.00 49 <b>0.</b> 00	190 IN. XT 190 IN. YT 190 IN. ZT		•
SECTIO	DN ( 1	DBOCY F	LAF UFF	ER	0	EPENDENT VA	RIABLE C	P
ALPHA	(1)	-4.11\$	BETA	(1) =	.903	XO '	31,199	31.600
								2648 2610
ALFHA	( 2) =	399	BETA	(1) = -4	.000	CX THE	31.199	31.899
						.000 000.025		2831 2853
VLPHA -	( 2) =	36\$	BETA	( 2) =	.012	XO FHI	31.190	31.800
						320,000 000,028		
LPHA (	(2) =	294	BETA	(3) = 4	.028	XO PHI	31.100	31,890
						.000 000.028		
LFHA (	3) =	3.834	BETA	(1) =	.012	CX IH9	31.100	31.899
						.999 329,990	2741 2780	

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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1107

4.000 1.400

ARC11-D14TA19 DTS+STRUT SRB-NOM NES-OFF BOFLAF U

(REUE16) ( 94 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

WE EAGING SAIN	· · · · · · · · · · · · · · · · · · ·		i nantellite sala
SREF       =       2690.0000 \$Q.FT.       XWRF         LREF       =       1290.3000 \$N.       YWRF         BREF       =       1290.3000 \$N.       ZWRF         SCALE       =       .0200			ELV-IB = 8.000 ELV-OB = RUDDER = .000 MACH = GIMBAL = 1.000
SECTION ( 1) BOOY FLAP UPPER	DEPENDENT VAR	TABLE CP	
ALPHA ( 1) = -4.09\$ BETA ( 1)	CX \$10. =	31.190 31.800	•
	.000 320.000	20542121 20612072	
ALFHA ( 2) =393 BETA ( 1)	CX 000.4- =	31.100 31.800	
	000. 000.038	20702166 20882093	
ALFHA ( 2) =291 BETA ( 2)	=003 XO ::	31.100 31.800	<b>Q</b> .0
	.000 320.000	20472110 20572065	RIGI PO
ALPHA (2) =318 BETA (3)	= 4.925 XO ::	31.190 31.890	
	000. 320.000	20932116 20362075	ORIGINAL PAGE L
ALPHA ( 3) = 3.861 BETA ( 1)	=996 XO :	31.100 31.800	A B B B B B B B B B B B B B B B B B B B

320,000 -.2085 -.2111

Ė	GE	٠	10	
1-9	102	1	12	

ARC11-0141A19 OTS+STRUT SRB-HI NG-HI BOFLAF U (REUE17) ( 04 FEB 75 )

## REFERENCE DATA

## FARAMETRIC DATA

ELV-IB = 8.000 ELV-08 = RUDDER = PECCUP

1.000

GIMBAL =

EREF BREF SCALE	= = = = = = = = = = = = = = = = = = = =	12	9D		ln.	Y 2	MR	•	=		.0000 0000.	IN.	Υ.Τ ΖΤ		
SECT	NC I	(	1)	BODY FI	ar upp	ER					DEP	ENDE	NT. VA	RIABLE C	<b>.</b>
ALPHA	(	1)	=	-4.155	ATBE	(	1)	=		.009		CX H <sup>o</sup>		31,190	31.899
													.000	3707	4371
	•											320	מכני	4632	5142
ALPHA	(	2)	:	426	BETA	. (	1)	=	-4	.003		CX H <sup>©</sup>		31,100	31.800
													.000	4325	4901
		•								•		320	, 000	5653	5971
ALPHA	(	2)	=	447	BETA	(	2)	=		ecc.		CX H•7		31.100	31.800
				. :									.000	3835	4274
												320	מכנים,	4933	5144
ALPHA	•	2)	=	-,435	BÉTA:	(	3)	=	4	.028		CX H <sup>€</sup>		31.190	31.899
													פפפ.	4512	4949
		-										320	פפפ,	5042	5364
ALPHA	t.	3)	=	3.930	BETA	(	1)	=		.000		FH	-	31 .199	
													.000	3782	4595
												320	נכפ.	4632	-,5311

٩	4	7#	44	444	75
_	Α.		33	447	12

# TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

FAGE 1109

# ARCII-BIATAIS OTS+STRUT SRB-HI MPS-HI BOFLAR U

(qEUE18) ( 04 FEB 75 )

PARAMETRIC DATA

## REFERENCE DATA

SPEF :	2690.0000 SQ.FT.	XMRF	=	976.0000 IN. XT	E_V-TB =	8.000	ELV-DB =	4,000
LREF =	1290.3000 IN.	YMRP	=	TY .NI CCCC.	RUDDER =	כפפ.	масн 😤	1,199
Safe =	1290.3000 IN.	ZMRP	=	499.9990 IN. ZT	GIMBA_ =	1.000		

SECTION		

.0299

#### DEPENDENT VARIABLE CP

SECTION ( 1) SULY PLAN UNITER 1	SEISENDENT VA	KIADLE CI
ALPHA (1) = -4.098 BETA (1) = .000	XO PHI	31.100 31.800
	.999	38724338
	320.000	41404588
ALPHA ( 2) =396 BETA ( 1) = -4.003	CX IH9	31.100 31.600
	.000	44254978
	320.000	47655142
ALPHA ( 2) =438 BETA ( 2) = .009	CX IHT	31.193 31.890
	.000	38544355
	320.000	40644526
ALPHA ( 2) =573 BETA ( 3) = 4.028	XO FHI	31.100 31.800
	.999	43304989
	320.000	46155081
ALPHA ( 3) = 3.915 SETA ( 1) = .000	CX IHT	31.100 31.800
	.999	41194593
	320,000	- 4235 - 4727



1.259

ARCII-DIATAIS OTS+STRUT SRB-HI MFS-HI BDFLAP U

(REUE19) ( 04 FEB 75 )

## REFERENCE DATA

# PARAMETRIC DATA B = 8.000 ELV-0

.000. 000.1

ELV-IB = RUDDER = GIMBAL =

REF	=	129	1 0005.0 1 0005.0 0050.						IN. YT		•
SECT	NCI	( 1	BODY FL	AP UPP	ER			DEF	ENDENT VA	RIABLE CI	:
LPHA	ť	1) =	-4.185	BETA	(1)	= -	.009		XO FHI	31,199	31.899
									. סמפ	2792	3093
					•				329.999	2876	3193
LPHA	(	2) =	459	BETA	(1)	= -4	.000		CX THT	31.199	31.800
					-				.000	3198	3569
									329.999	3275	3516
V_PHA	. (	2) =	438	BETA	( 2)	=	.012		XO THT	31.190	31.899
									פפפ.	- 2844	3248
		٠							320.000	2919	3259
<b>NLPHA</b>	ι	2) =	549	BETA	( 3)	= 4	.928		XO PHĪ	31.100	31.800
									.000	3919	3647
									329.000	3063	3530
NLFHA	(	3) =	3.516	BETA	( 1)	=	.912		хэ Іня	31.100	31.800
									.000	3965	3467
									329.990	-,3134	3444

DATE OR MAY 75 TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

FAGE 1111

ARC11-014TA19 OTS+STRUT SRB-HT MFS-HT BDFLAF U

(REUE29) ( 04 FEB 75 )

# REFERÈNCE DATA

# PARAMETRIC DATA

1.000

ELV-IB = RUDDER = GIMBAL =

8.000 ELV-08 = .000.

SEEF = 2690.0000 \$Q.FT.		
LREF = 1290.3000 N.	I CCCC = TRMY	N. YT
BREF = 1290.3000 N.	ZMRP = 400.0000 I	N. ZT
SCALE = .0200		
SECTION ( 1) BODY FLAP UPPE	R DEFEN	DENT VARIABLE CP
ALFHA ( 1) = -4.167 BETA	The state of the s	008.16 001.16 CX
	• •	.00020922340
•	3	20.00022502398
		22.0.2.2 .2.2.3
ALPHA ( 2) =489 BETA	· · · · · · · · ·	XO 31.100 31.800
		.00022902690
	. 3	29.99024272546
	•	•
ALPHA ( 2) =432 BETA		XO 31.100 31.800 :
		.00021472486
	3	20.00021662401
ALPHA ( 2) =486 BETA	(3) = 4.025	208.16 CC1.16 CX
	!	PHI
		.00022372618
	· 3:	29.99923162547
ALPHA ( 3) = 3.657 BETA	(1) = .009	KO 31.199 31.899
		HI
	•	.99922842631
	33	20.00023252554

1.490

ARC11-D14TA19 DTS+STRUT SR8-OFF MS-OFF BDFLAF U (REUE21) (D4 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 \$0.FT. XMRP = 976.0000 IN. XT

#### PARAMETRIC DATA

1.000

= 80-VJ3 CCC.8

- HOAM CCC.

ELV-IB = RUDDER = GIMBAL =

LREF BREF SCALE	=	129	99.	3000 1	N.	714 Z14	₹ - ₹ -	=	499	.0000 CCCC.	IN. YT		
SECT	I ON	Ċ	1)8	YOUY PL	AF UFFE	R				DEF	endent va	RIABLE C	
ALPHA	(	1)	= -	4.205	BETA	( 1	)	=	.003		XO FHI	31,199	31.800
											.000	2810	2849
.•											320.000	2845	2846
A'_PHA	ţ	5)	= .	189	BETA	( 1	)	= -	4 .000		XO PHI	31.100	31.800
											.000	2919	2945
												2931	
ALPHA	. (	2)	= .	291	BETA	( 2	<b>)</b>	=	.012		XO THI	31.100	31.899
											.000	2729	2753
												2744	
ALPHA	(	2)	=	396	BETA	( 3	) -	=	4.928		XO FHI	31.190	31.899
											.000	2915	2949
									•	•		2912	
ALPHA	(	3)	= -	3.969	BETA	` <b>(</b> :	1)	=	.006		ХЭ ТНЭ	31.100	31.890
											פמפ.	2858	2879
				•								-,2873	

	_			
CAT	Έ	93	MAY	75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC .11-014 )

FAGE 1113

1,499

ARC11-014TA 9 DTS+STRUT SRB-NOM MCS-NOM BDFLAF U (REUERR) ( D4 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

פֿפפ,

1.000

ELV-IB =

RUDDER =

GIMBAL =

8.999 ELV-08 =

REF	ŧ	26	37	בכבכם.	SQ.F	۲.	Χħ	ĸF		=	976	.9999	IN.	XT			
REF	=	12	95.	ממפצ.	IN.		Y	₹P		=		פפרפ.	IN.	YT			
												מפכפ, ו					•
				.0200			7										
SECT	ION	į	1)!	YOCE	FLAP I		ER					DEP	ENDEI	AV TA	RIABLE CE	<b>).</b>	
LEHA	ť	1)	= .	-4.16	P BE	ra	(	1)	=		.006				31.199	31.600	
													PH!				
						•							•	מכח	-,2468	2760	
													320	ממס,	2531	2700	
ALPHA	(	2)	=	34	S BE	TA	(	1)	=	-3	.997		CX Há		31,100	31,800	
														-	2782	3975	
															2788		
ALPHA		2)	=	36	6 BE	TÄ	<b>(</b> :	2)	=		.012		CX H≅		31.199	31.890	
														•	2576	2824	
			•												2515		
ALPHA	ι, τ	2)	=	52	2 9E	TA.	(	3)	=	4	.031				31.100	31.899	
													FН	-	0744	2044	
															2714	. –	
								,					220	,900	2682	2546	
ALPHA	<b>(</b>	.3)	=	3.94	2 9E	TA	(	1)	=		.912		CX HFI		31.199	31.800	
														מבט,	2710	2970	
													320	ำกาก	- 2674	- 2963	

cce,

ARCTI-DIATATE OTS+STRUT SEB-OFF WS-OFF BOFLAR U

(REUE23) ( 04 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

SHEF	=	2699	.0000	sg.FT.	XMR	P =	976	מפפפ.	IN. XT		•		ELV-18 =		פפפ.	ELV-O
LREF	=	1290	.3000	IN.	YMR	F ∓		פפכפ.	IN. YT		•		RUDDER :		פפס.	MACH
BREF	=	1290	.3000	IN.	ZMR	7 3	400	.0000	IN. ZT				GIMBAL :	: 1	.פפפ	
SCALE	3		.0200													•
SECT	I ON	( 1)	BODY F	LAP UPF	ER			DEF	ENDENT V	RIABLE C	þ					
ALPHA	(	1) =	-4.947	BETA	(1)	=	.000		XO PH1	31,199	31.899					
									.000	2467	2698					
									320.000	2543	2630					
ALPHA	•	2) =	276	BETA	( 1)	= -4	.993		XO PHI	31,199	31.800		•			
									.000	2893	2974					
•									320.000	2836	3011					
ALPHA	(	2) =	237	BETA	( 2)	= -	.009		CX IHFI	31.190	31.600					
									ככם,	2230	2199	•				
									329,999	2247	2158				.0	0
ALPHA	t	2) =	195	BETA	( 3)	= ,4	.928		CX tH <sup>q</sup>	31.100	31.800				0	
									.999	2485	2454				$\mathcal{O}$	
•									320,000	2514	2454			160	J.	
ALIFHA	(	3) =	3,855	BETA	( 1)	=	.003		XO PHI	31,199	31.800					
													4	N 17.		

320.000 -.2263 -.2298

78	0.3	MAY	71

#### TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-914 )

PAGE 1115

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1,100

#### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF BDFLAF U

(REUE24) ( 04 FEB 75 )

ELV-OB =

MÁCH =

#### REFERENCE DATA

#### FARAMETRIC DATA

.ספפ

.000

1,000

SqEF = 2690.0000 Sq.FT. LREF = 1290.3000 IN. BqEF = 1290.3000 IN. SCALE = .0200	XMRP = 976.0000 IN. XT YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT		ELV-IB = RUDDER = GIMBAL =
SECTION ( 1) BODY FLAP UPP	ER DEFENDENT VA	IRIABLE CF	
ALPHA ( 1) = -3.993 BETA	CX ecc. = (1)	31.199 31.899	
	.000 320,000		<b>Q</b>
ALFHA ( 2) =279 BETA	(1) = -4.003 · XO PHI		IGIN POO
	000. 320.020		OF POOR QUALITY
ALFHA ( 2) =246 BETA	PHI		P.A.G. UALL
	220,020 320,020		TY IS
ALPHA ( 2) =273 BETA	CX 250.4 = (5)	31.100 31.800	
	000. 000.028		
ALFHA ( 3) = 3.854 BETA	CX E00 = (1)	31.199 31.899	
	220,000 320,000		•

.000 1,250

ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF BOFLAP U

(REUE25) ( D4 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

SREF LREF					XMRP YMRP		976.000 2000,	IN. IN.					ELV-18 = RUDDER =	.000	ELV-08 Mach
			פפפנ.נ		ZMRF	=	499,999	J IN.	Zτ				GIMBAL =	1.000	
SCAL	=		.0200							,					
SEC	rto	n ( 1)	BOCY	FLAR UPP	ER		DEI	=ENDE	NT VA	RIABLE CI	•				
ALPH	<b>A</b> (	1) =	-3.97	S BETA	(1)	=	.003	X) PH	I	31,199	31.800				
									.000	3929	3098				•
								320	.000	3058	3993				
ALPH	A (	2) =	25	5 BETA	(1)	= -4	.000	XO PH	) II	31.100	31.899				
									.000	3258	3283				
								320	.030	3262	3293				
ALPH	A (	(2) =	~.28	5 BÉTA	( 2)	=	.012	XO HP	ı II	31.100	31.800	7	ORIGINAL OF POOR		
									.000	2987	3012		# <b>G</b>		
								329	פכפ,	2979	2990		<b>S</b> 包		
ALPH	A (	(2) =	18	BETA	( 3)	= 4	.031	XO FH	ı IÎ	31.100	31,890	Ì			
									.000		3383	`	PA. QUA		
								320	.000	3358	3381		<u>A</u>		
ALPH	<b>A</b> (	(3) =	4.90	BETA	(1)	=	.003	X2 4-7	) łI	31.199	31.899		ALL		
									פפפ.	3253	3297				
								320	מכפ. ו	3269	3273				

DAS	60	MAY	74

#### TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

FAGE 1117

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF BOFLAR U

(REUE26) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

									-								
SQEF	=	2690	בכככ.	SQ.FT.	XMRP	=	976	ספפפ,	IN.	XT				ELV-IB =	פפפ.	ELV-OB	=
REF	=	1290	.3000	IN.	YMRF	=		בכככ.	IN.	YT				RUDDER =	.ססס	MACH	=
BREF	=	1290	.3000	IN.	ZMRF	=	499	מכככם,	IN.	ZT				GIMBA_ =	1.000		
SCALE			.0200							-				· <del>-</del>			
SECT	ION	( 1)	1 YOCE	FLAP UPP	ER			DEFI	ENDEN	iT VA	RIABLE CI						
ALPHA	( )	l) =	-3.90	BETA	( 1).	=	.009		XO FHI		31.199	31.899		•			
										999	2687	2676					
									320.	000	2659	2721					
ALPHA	( 1	2) =	24	S BETA	( 1)	= -4	.999	÷	XO FHI		31.199	31.899				.0.	
										. כככ	2773	2795				<i>₹</i> ,	
									320.	990	2777	2796				ኤ`	
			-												~ ~	,	
ALPHA	( )	2) =	23	BETA	( 2)	=	.912		XO THT		31.199	31.890					
										פפפ	2694	- 2618					
									320.			2609	1		60 XX		
									JEU.	.,,,,	-,2,353	2933		· A	3.65°		
ALPHA	(- 1	2) =	23	BETA	( 3)	= 4	.031		XO THE		31.100	31.800		1		•	
						•				999	2898	2845					
									320.	999	2894	2896					
											177						
ALPHA	( :	3) =	4,04	BETA	( 1)	=	.996		XO THI	•	31 . 199	31.899					
												0770	•				
										999	2727						0
					•				329.	:7:5:1	2728	2741					
															,	Į.	Ų Ę
																	~ 4

ORIGINAL PAGE IS

ARC11-014TA19 OTS+STRUT SRB-NON NES-NON BDFLAF U

(REUE27) ( 84 FEB 75 )

FARAMETRIC DATA

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

LREF = 1290.0000 IN. YMRP = .0000 IN. YT

RUDDER = .000 MACH = .000

RREF = 1290.0000 IN. ZMRP = 4000.0000 IN. ZT

GIMBAL = 1.000

320.000 -.3843 -.4295

SCALE = .0200 DEPENDENT VARIABLE CF SECTION ( 1) BODY FLAF UFFER XO 31.100 31.800 ALPHA (1) = -4.125 BETA (1) = .000PHI .000 -.3898 -.4657 320,000 -,4616 -,5213 CX 31,100 31,800 ALPHA ( 2) = -.396 BETA ( 1) = -4.003 PHI .000 -.4626 -.5194 325,000 -.5061 -.5493 31.100 31.800 ALPHA (2) = -.408 BETA (2) = .009 ΧO PHI .000 -.3446 -.4028 320,000 -.4078 -.4685 XO 31.100 31.800 ALPHA (2) = -.334 BETA (3) = 4.025 PHI ,000 -.4240 -.4927 320.000 -.4877 -.5339 XO 31.190 31.800 ALPHA (3) = 3.79# BETA (1) = -.003 FHI .000 -.3338 -.3810

#### U RACELE-CENT MEN-BPS TURTS+STG PEATALICE U

(QEUE28) ( 04 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

SPEF =	2690.0000 SQ.FT.	XMEP	=	976.0000 IN. XT				ELV-IB =	.000	ELV-OB	=	.000
				TY .NI CCCC.	•			RUDDER =	פפפ	MACH		1.100
BREF =	1290.3000 IN.	ZMRF	=	400.0000 IN. ZT				GIMBAL =				
SCALE =	.0200											

SECTION ( 1) BODY FLAF UPPER	DEPENDENT VARIABLE CP
ALPHA (1) = -4.191 BETA (1) = .003	XD 31.199 31.899
	.99942744664 320.00045964912
ALPHA ( 2) =46\$ BETA ( 1) = -4.003	XO 31.190 31.890
	.00046885194 320.00050085371
ALPHA (2) = -,447 BETA (2) = .012	XO 31.100 31.800
	PHI .99942994675 320.99945234879
ALPHA ( 2) =40\$ BETA ( 3) = 4.031	XD 31.100 31.800
	PHI .9994732 +.5252
ALFHA ( 3) = 3.819 BETA ( 1) = .009	329.00059815202 XO 31.100 31.800
	FHI .90044724924
	329.99946625112



ARC11-014TA19 OTS+STRUT SEB-NON MES-NOM BOFLAF U

(REUE29) ( 94 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

	•														
SREF	=	269	ככככ. כ	SQ.FT.	XMRF							ELV-IB =	,000	EL.V-08	
LREF	=	129	פפפב. ב	IN.	YMRF	=		I IN. YT				RUDDER =	מפני.	MACH	=
BREF	=	129	פפפב. פ	IN.	ZMRP	= 4!	פַבַּבָּבַ, בַּוּ	IN. ZT				GIMBAL =	1.000		
SCALE	;		.0200												
SECT	10	N ( 1	) POCE (	FLAP LUPP	ER		DEF	ENDENT VA	RIABLE C	P					
ALPHA	. (	1) =	-4.98	D BETA	(1):	00	5	cx	31.199	31.899				•	
								FHI							
									-,3029	3339					
								320.000	3305	3560			*.		
ALPHA	(	5) =	-,37	BETA	(1):	= -3.99	?	XO IH9	31.199	31.800					
								.000	3300	3647					
								320.999		-,3873					
ALPHA	. (	2) =	49	BETA	( 2)	= .012	2	XO PHI	31.190	31.800	•				
								פפפ.	3118	3431	~ ~				
				•				320,000	3258	3699	SE FE			•	
ALPHA	. (	2) =	38	BETA	( 3)	= 4.93	1	XO PHI	31,190	31.890	POC				
								.999	3421	3862	∌⊵				
								320.000	3540	3935	Q				
ALPHA	• (	3) =	3.84	BETA	(1):	= .09	3.	XO: FHI	31,199		ORIGINAL PAGE IS OF POOR QUALITY				
		•						.000	3235	3633					
		٠.				'		329,999	+.3498	3846	A				

# ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM BOFLAF U

(REUE39) ( 94 FEB 75 )

.000 MACH =

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

	= 2690.0000 SQ.FT. X	NRP = 976.0000	IN. XT		E_V-1
245.	= 1290.3000 IN. Y	.0000 sav	IN. YT		RUDDE
LAFE	= 1290.3000 IN. Z				GIMBA
		#(/· = 433/33-5			
SCALE	= .0200			•	
SECT	MON ( 1) BODY FLAP UPPER	DEP	ENDENT VARIABLE CF		
ALPH	A ( 1) = -4,224 BETA (	1) = .996	XO 31.193	31.693	
				2527	
			329,9992454		
ALPH	A ( 2) =444 BETA (	1) = -3.997	XO 31.199	31.899	
			.0002550	2871	
				2799	
A!_PH	A ( 2) =49\$ BETA (	2) = .016	XO 31.199	31.800	OF OF
	•		.0002358	2650	ਹਿ ਖ
			320.0002331	2635	82
ALPH	IA ( 2) =360 SETA (	3) = 4.031	XO 31.100	31.899	R Q
				2724	
				2626	AGI AL
ALF	(A ( 3) = 3.819 BETA (	1) = .939	XO 31.193	31.890	ORIGINAL PAGE IS
				2891	

ARC11-D14TA19 OTS+STRUT SRB-OFF MPS-OFF BOFLAP U (REUES1) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

#### FARAMETRIC DATA

יפפט.

בכם.

2.000

E\_V-18 =

RUDDER = GINBAL =

SREF	= 5690	. בכככם	g.FT.	XMRF	=	976.	ן סבככי.	IN. XT		
LREF	= 1290	ז פפפנ.								
BREF	= 1290	.3000 T	N.	ZMRF	=	400.	בכככם.	IN. ZT		
SCALE	=	.0200								
SECT	(1) NG	BODY FL	AF UFF	ER			DEPE	VDENT VA	RIABLE CI	•
ALPHA	(1) =	-4.020	BÉTA	(1)	=	.006		CX THT	31.190	31.800
		:						.000	2398	2305
							3	529 .005	2340	2378
ALPHA	( 2) =	288	BETA	·( i);	= -4	.003		XO FHI	31.199	31.899
								פפפ.	2680	2811
			•					320,999	2791	2793
ALPHA	( S) =	279	BETA	( 5)	=	.009		CX IH9	31.100	31,890
								ספת.	2117	2043
		:						329,999	2135	2057
ALPHA	(2) =	264	BETA	( 3)	= 4	.031		CX IHR	31.100	31.890
								.000	2469	2545
							•	320.000	2486	2523
ALPHA	( 3) =	3.976	BETA	(1)	<b>-</b>	.פפפ		CX IHT	31.199	31,800
								.000	2111	2982
								320.000	2133	2157

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#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1123

1.100

ARC11-014TA19 OTS+STRUT SRB-JFF NOS-OFF BOFLAF U

(REUE32) ( 04 FEB 75 )

ELV-08 =

#### REFERENCE DATA

ALPHA ( 3) = 3.98 SETA ( 1) = .000

#### PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRF = 976 LREF = 1290.3000 IN. YMRF = BREF = 1290.3000 IN. ZMRF = 400 SCALE = .0200		000. = 81-V-18 000. = 9300U9 000.5 = JABNID
SECTION ( 1) BODY FLAP UPPER	DEPENDENT VARIABLE CF	
ALPHA ( 1) = -3.906 BEYA ( 1) = .000	XO 31.199 31.899 PHI	
	.00034133488 320.00034263424	
ALPHA ( 2) =255 BETA ( 1) = -4,000	XO 31.199 31.899 PHI	
	.00036373687 320.00036443662	
ALFHA (2) =213 BETA (2) = .009	XO 31.100 31.800 FHI	
	.99931733227 329.99931473173	
ALPHA (2) =219 BETA (3) = 4.028	XO 31.100 31.800 FHI	6
	.99938993873	~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~

CX

FHI

329.999

320.000 -.3865 -.3875

.000 -.3417 -.3425 0.000 -.3384 -.3364

31.199 31.899



1.259

ARC11-0141A19 OTS+STUT SRB-OFF MFS-OFF BDFLAP U

(REUE33) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

2.000

= 80-VJ3 000. .000 MACH =

ELV-IB =

GIMBAL =

89EF = 1290,3000 IN.	DEPENDENT VARIABLE CP
ALFHA ( 1) = -4.044 BETA ( 1) = .003	XO 31.199 31.899
	.0002884296 320.0002922293
ALPHA (2) =198 BETA (1) = -4.000	208.16 001.11 CX
	.0003153321 320.0003164318
ecc. = (2) ATBB S81 = (2) AHPJA	XO 31.199 31.899 PHI
	297291297 291291291
MERHA (2) =210 BETA (3) = 4.031	XO 31.100 31.800
	.0003292337 329.0003332336
METHA (3) = 3.846 BETA (1) = .003	XO 31.100 31.800 FHI
	.0003129319 320.0003105311

#### ARC11-D14TA19 OTS+STRUT SRB-OFF MFS-OFF BDFLAP U (REUE34) ( D4 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

= 80-V\_18 = .000 ELV-08 = RUDDER = .000 MACH = GINBAL = 2.000

SREF	=	269	יבב. כנ	י כנ	SO.FT.	XM	RF	=	976	. פפפפ	IN.	XT		• •
LREF						YM				פפפפ.				
BREF	Ξ	129	99.399	ij	IN.	ZM	₹₽.	Z	400	.0000	IN.	ZT		
SCALE	=		.029	כנ										
SECT	I/ON	( 1	1)8001	F	LAP UPP	ER				DEP	ENDE	AV TV	RIABLE C	•
ALPHA	(	1):	= -3.9	81	BETA	( 1	) =	•	.999		-		31 . 199	31.899
												•	2622	~.2658
													2630	
ALPHA	(	2) :	=8	231	BETA	( 1	) =	<b>:</b> , = (	1.900		KH.		31,100	31.899
			,								,	000	2776	2791
											320	.000	2779	2757
ALPHA	(	2) :	= -,1	231	BETA	( 2	) =	:	.009		XO PH1		31.190	31.800
						•						.ססס	2559	2609
											329.	כככ	2539	2547
ALPHA	T :	2) =	=8	19	BETA	( 3	) =	: 4	.028		X) P41		31 . 199	31.899
												.999	2833	2877
											320	,000	2830	2869
ALPHA	• (	3) :	3.9	30	9ETA	( 1	) =	:	.003		XO FH1		31 .199	31.800
												.000	2683	2747
											329.	.000	2654	2683

## NECT 1-014TA19 OTS+STRUT SRB-NOW MPS-NOW BOFLAR U

(REUE35) ( 04 FEB 75 )

MACH =

#### REFERENCE DATA

#### FARAMETRIC DATA

.000

2.000

ELV-IB = RUDDER = GIMBAL =

SREF = 2690.0000 SQ.FT. XHRF = 1290.3000 IN. YHRF = 1290.3000 IN. ZHRF = 1290.3000 IN. ZHRF = 1290.3000 IN.	DODO TN VT
SECTION ( 1) BODY FLAF UPPER	DEPENDENT VARIABLE CF
ALPHA (1) = -4.398 BETA (1) =	.009 XO 31.190 31.890 FH1
	.00043004486 320.00042864431
ALPHA (2) =390 BETA (1) = -4	.000 XO 31.100 31.800 PHI
	.00049135133 320.00047284808
ALFHA ( 2) =384 BETA ( 2) =	008.15 011.15 CX 21C.
	.09941924199 320.99941623983
ALPHA (2) =345 BETA (3) = 4.	025 XO 31.190 31.800
	.99948974855 329.99946984948
ALPHA (3) = 3.993 BETA (1) = .	CO8.1E CO1.1E CX 30.00
	.99939214997 329.99039194981

PAGE 1127

.000

1,199

ARCII-DIAIAID (DE FEB 75 ) (DE FEB 75 )

MACH =

- 80-VJ3 000.

#### REFERÊNCE DATA

#### PARAMETRIC DATA

ELV-18 =

RUDDER = .000 GINBAL = 2.000

59EF = 2690.0000 50.FT. XMQF = 976.0	0909 IN. XT
	9999 IN. YT
BREF = 1290.3000 IN. ZMRF = 400.5	9993 IN. ZT
SCALE = .0200	•
· ·	
SECTION ( 1) BODY FLAP UPPER	DEPENDENT VARIABLE CP
ALFHA ( 1) = ~4.998 BETA ( 1) = .093	XD 31.199 31.899
	r-hī
	.00046284900
	320.00049064838
ALPHA ( 2) =342 BETA ( 1) = -4.050	%D 31.100 31.800
	PHĪ
	.99959295221
	329.90051685308
ALFHA ( 2) =318 BETA ( 2) = .012	XO 31.199 31.890
	PHI
	.99943514629
	329.00045144552
ALPHA ( 2) =417 BETA ( 3) = 4.931	* XO 31.190 31.890
	FHI
	.00051325295
	329.00050944953
ALPHA (3) = 3.717 EETA (1) = .000	XÓ 31.199 31.899
	PHI
	.00048885133
	320.00050685059

ARC11-014TA19 OTS+STRUT SRB-NOW MFS-NOW BOFLAR U

(REUEST) ( 04 FEB 75 )

FARAMETRIC DATA

#### REFERENCE DATA

# SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT ELV-IB = .000 ELV-OB = .000 LREF = 1290.0000 IN. YMRF = .0000 IN. YT RUDDER = .000 MACH = 1.250 BREF = 1290.0000 IN. ZMRF = 400.0000 IN. ZT GIMBAL = 2.000 SCALE = .0000 DEPENDENT VARIABLE CP

SECTION ( 1) BODY FLAP UPPER	DEPENDENT VARIABLE CP			
ALFHA ( 1) = -4.149 BETA ( 1) = .006	XO 31.100 31.800 PHI			
	,99934683793 329.99937953739			
ALPHA (2) =414 BETA (1) = -4.003	XO 31.100 31.800 FHI			
	.00037323937			
	329.99938523996			
ALPHA (2) =459 BETA (2) = .909	XO 31.190 31.899			
	.00035123768			
	320,00037273801			
ALPHA (2) =468 BETA (3) = 4.028	XO 31.100 31.800			
	.00038233990			
	320.00038973857			
ALPHA (3) = 3.864 BETA (1) = .003	XO 31.100 31.800 PHI			
	.99037173964			
	329,000 - 3918 - 3997			

DATE	. 03	MAY	73
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#### TABULATED SOURCE PRESSURE DATA - TAIR ( ARC 11-014 )

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MACH = 1.499

ARC11-014TA19 OTS+STRUT SRB-NOW MFS-NOW BDFLAR U

(REUE38) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

												_						
					SQ.FT.	XMR	=	976.0000	IN. X	(T		,			ELV-IB =	ממס.	ELV-08	=
	LREF	=	1290	פפפב.	In.	YMR	=	ככככ.	IN. Y	T			•		RUDDER =	.000	MACH	=
	BREF	.3	1299	פפפב.ו	1N.	ZMRF	: :	400,0000	IN. Z	T					SIMBAL =	2,000		
	SCALE	•		.0200											_			
	SECT	10N	(1)	900g	FLAP UP	ER		DEF	TNBCNE	VAS	TABLE C	•					•	
	ALPHÁ	C	1) =	-4.15	5 SETA	( 1)	=	.003	CX		31 .199	31,800.						
									PHI									
				•		•			0.			2789						
									320.0	פפו	2911	2823						
	ALPHA	ţ	2) =	38	7 BETA	(1)	= -4	.999	CX IHS		31.199	31.899						
									.0	מכי	2785	2945	•				•	
									329.9	00	2752	2897						
	ALFHA	(	2) =	31	B BETA	( 2)	= ,	.009	XO PHI		31.199	31.800	,					
•									e.	פפ	2698	~.2820					•	
	•								320.0	00		2811		•				
	ALFHÁ	(	2) =	35	4 BETA	( 3)	= 4	.931	CX THP		31 . 199	31.800						
									.ם.	מפ	2756	2947						
									320.0	99	2748	2760						
	ALPHA	•	3) =	3.939	BETA	( 1)	= .	.000	XO FHI		31 .100	31.899			•			
									.00	00	2723	2928		•				
									, ,									

320.000 -.2731 -.2985

.000

.900

ARC11-014TA19 OTS SRB-OFF MS-OFF BOFLAF U

(REUES9) ( 04 FEB 75 )

#### REFERÈNCE DATA

# PARAMETRIC DATA .000

.ססס

1.000

ELV-18 = RUDDER = GIMBAL =

SKEF UREF BREF SCALE	=	1	299 299	.3000 I .3000 I	Q.FT. N. N.	XI YI Zi	41217 147217 147217	* **	976 : 400	TX .NI 0000. TY .NI 0000. TX .NI 00000.		
SECTI	tot	4 (	1)	BODY FL	AP UPPI	ER				DEFENDENT V	ARTÁBLE CI	-
ALFHA	ŧ	1)	Ξ	-8.139	BETA	(	i) :	•	.000	PHI	31.100 2566	
											2599	
ALPHA	•	5)	=	-4.932	BETA	( :	!) =	:	.000	CX IHT	31,190	31.899
										.000	2293	2189
										320,000	2351	2119
ALPHA	(	3)	=	228	BETA	( 1	1) :	: -	4.003	FHI	31.100	
											2268 2354	
ALPHA	(	3)	2	249	BETA	( 2	?) =	•	.012		31.190	31.800
										FHI		
											2086	
										320,000	2130	1975
ALPHA	(	3)	=	261	BETA	( :	5) =	:	4.028	СX ТНТ	31.199	31.890
											2330	
										320.000	-,2338	2264
ALPHA	(	4)	=	4.032	BETA	( 1	) =		.003	XX THT	31.100	31.890
										.000	2213	2148
										320.000	2233	2031
ALPHA	(	5)	=	7,929	BETA	( 1	) =		.003	FHI	31.199	
									-		2262	
										320,000	2296	2227

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#### TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1131 "

						ÅR	C11-0141A19 O	īs	SRB-OFF NES-OF	F BDFLAP U	
		REFEA	ENCE DA	<b>NTA</b>							
SREF =	2699	2.9999	SQ.FT.	XMR	F. =	976	5.9990 IN. XT		•		ELV-18 =
LREF =	1299	בפפב.נ	IN.	YMR	F =	:.	TY .NI CCCC.				RUDDER =
SCALE =	129!	.0008.0	IN.	ZMR	F.=	405	זא. מו ממפפינו				GIMBAL =
SECTIO	N ( 1)	B YOC B	LAP UPF	ER			DEPENDENT V	ARIABLE (	CF-	,	
ALPHA (							χο				
						:	PHI	311.55	3033		
								3307	3341	•	
	33.5				•	•			3132		
ALPHA (	2) =	-4.963	BETA	(1)	=	.003	κo	31.199	31.890		
							· PHI				00
									3 - 3378		# # H
							320.000	3368	3138		PG
ALPHA (	3) =	225	BETA	(-1)	= -	4.999	X <b>)</b> PHI-	31.100	31,890		OR A
							.000	3763	- 3814		ن ت
		•					320,000	3724	3465		P.A.
ALPHA (	3) =	159	BETA	( 2)	=	.012	PHI	31.190			ORIGINAL PAGE IS
									3444		<b>**</b>
4.5							320.000	3394	3143		_
ALFHA (	3) =	312	BETA	( 3)	<b>∓</b> .4	.928	XO FH <b>I</b>	31.100	31.899	•	
							.999	3528	3592		
							320.000	3566	3342		
ALFHA (	4) =	3.885	BETA	(1)	= '	.999	CX THT	31.190	31.890	:	
							.000	~.3772	3811		
							320.000	3791	3473		
ALPHA (	5) =	8,973	BETA	(1)	=	.000	cx	31.199	51.890		

PHI

.999 -.4231 -.4269 320.000 -.4289 -.3927

(REUE40) ( 04 FEB 75 )

FARAMETRIC DATA

.000 MACH .= 1.199

1.000

ARC11-014TA19 OTS SRB-OFF MES-OFF BOFLAR U

# PARAMETRIC DATA

(REUE41)- ( D4 FEB 75 )

#### REFERENCE DATA

SREE = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT TY .NI פכפפ, = קאץ און פכפד. כפצו = TY .NI פכפר. ZMRF = 400.0000 IN. ZT BREF = 1290.3000 IN.

SCALE = .0200

SECTION ( 1)BODY PLAN UPPER DEPENDENT VARIABLE CR XO 31.100 31.800 ALPHA ( 1) = -8.232 BETA ( 1) = -.006 FHI .000 -.3006 -.3048 320.000 -.3035 -.2841 XD 31.100 31.800 ALPHA (2) = -4.098 BETA (1) = -.006 PHI .000 -.2898 -.2912 320,000 -.2898 -.2665 ALPHA (3) = +.245 BETA (1) = -4.000XD 31.100 31.800 PHI .000 -.3144 -.3236 320.000 -.3105 -.2900 XD 31.190 31.899 ALFHA ( 3) = -.171 BETA ( 2) = .012 PHI .000 -.2940 -.2931 320,000 -.2934 -.2672

ALPHA ( 3) = -.171 BETA ( 3) = 4.025

PHI .000 -.3198 -.3244 320.000 -.3180 -.3015

XO 31.199 31.899

XD 31.100 31.890

ALPHA (4) = 7.860 BETA (1) = -.903

PHI .000 -.3512 -.3584 329.000 -.3510 -.3245

.000 .000 ELV-08 = E. V-18 = .000 MACH = 1.250 RUDDER =

GIMBAL = 1.000

DAT	Ε	93	MAY	75
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## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-914 )

FAGE 1133

	ARC11-0141A19 OTS	SRB-OFF MS-OFF BDFLAP U
REFERENCE DATA		
SREF = 2690.0000 SQ.FT. XMRP = 1290.3000 IN. YMRP = BREF = 1290.3000 IN. ZMRP = SCALE = .0000	JOOGO TN. VT	E R G
	DEPENDENT VARIABLE C	<b>a</b>
		r
ALFHA (1) = -4.059 BETA (1) = .	201.190 XX 000 PHT	31.899
	.9992586 329.9992601	2607 2173
ALPHA (2) =189 BETA (1) = -3.5	997 CX 31.100	31.800
	.9992688 329.0992689	
), ± (2) ATBB (21 = (2) AHPLA	PHI	31.800
	.0002503 320.0002500	2539 2186
ALPHA ( 2) = .02 BETA ( 3) = 4.0	28 XO 31.100 PHI	31.899
	.0002723	2731 <sup>©</sup>
	329.9992744	2398
ALPHA (3) = 3.924 BETA (1) = .0	93 XO 31.100 PHT	31.800
	.0002620	2614
	320.0002614	2262
ALPHA ( 4) = 7.809 BETA ( 1) = .0	001.16 CX 60	31.890
	.9992746	
	320,0002749	2419

PARAMETRIC DATA

(REUE42) ( 04 FEB 75 )

ELV-IB = RUDDER = GIMBAL = .000 .000

1,000

.000

. 999

ARC11-014TA19 OTS - SRB-YOM MP3-OFF BOFLAR U (REUE43) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

.000 1.000

SLV-18 =

RUDDER = GIMBAL =

SREF = 2690.0000 5 LREF = 1290.3000 1 BREF = 1290.3000 1 SCALE = .0200	IN. YMRF	± .00	DO IN. YT	
SECTION ( 1) BODY FL	AF UFFER	£	DEPENDENT VA	RIABLE CP
ALPHA ( 1) = -8.133	BETA (1) :	.003	CX IHT	31.100 31.800
				28582968 29282888
ALPHA ( 2) = -4.00	BETA ( 1) =		CX IHS	31.100 31.800
				24522263 24442165
ALPHA ( 3) = +.342	BETA (1) =	-4,990	CX THE	31.100 31.800
	•			24802512 24602417
ALPHA ( 3) =357	BETA (2) =	.012	CX IHS	31.190 31.899
				22322319 22812186
ALPHA ( 3) =288	BETA ( 3) =	4.022	CX IHT	31.100 31.800
			.999	23732457 24512451
ALPHA ( 4) = 3.924	BETA ( 1) =	.000	XO THT	31.199 31.899
			. 000 000. 028	21652235 22622116
ALPHA ( 5) = 7.962	BETA ( 1) =	.000	X⊃ IH¶	31.100 31.800
			.000	21652294 22962049

1.100

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ARC11-0141A19 OTS

SRB-NO4 MPS-OFF BOFLAR U (REUE44) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

#### PARAMETRIC DATA

.000

1.000

ELV-18 = RUDDER = GINBAL =

											6.0000	IN. XT		
t s	REF	=	12	90.30	מכ	tn. 🗀	YF	ЯF		:		IN. YT		
9	REF	=	12	90.30	ו ממ	in.	Zh	ŔΡ	:	40	מכפפ. מ	IN. ZT		
5	CALÉ	=		.029	ממ								•	
•	SECT	ION	. (	1)900	Y (*)	AP UPF	ER				DEF	ENDENT V	ARTABLE CI	•
A!	LPHA	Ç	1)	= -8.	inè	BETA	( :	1)	2	.000		cx	31.100	31.800
												PHI		
												.000	3935	3979
												320.000	3055	2851
A!	LFHA	(	2)	= -4.	956	BETA	( !	1) :	=	.000	)	XO EHI	31,100	31.800
												.000	3145	3221
													-,3169	
A!	LFHA	Ĺ	<b>3</b> ).	=, -, <sup>,</sup>	363	BETA	( )	!) :	=	-4 . 993		CX THT	31.199	31.890
												ככפ.	3614	3665
				•								320.000	3557	3308
A	LFHA	(	3)	<b>=</b>	363	BETA	( 2	2) :	=	.012	<b>!</b> · .	XO PHI	31.199	31.699
												.999	- 3261	3321
													3264	
A	_FHA	(	3)	=	393	BETA	( ;	5) :	= 1	4.022		XO FHI	31,199	31.800
				•								.000	3351	3399
					٠							329.999	3374	3175
At	FHÀ	(	4)	= 3.1	888	BETA	( 1	() :	=	.000		CX	31.199	31.890
											•		3771	3835
			•				•						3764	
At.	.PH4	(	5)	= 7.9	977	BETA	.( \$	) =	=	,999	· •	XO THT	31.190	31.800
1			•										4069	4122
													4955	
												J	-,4255	

ARC11-0141A19 OTS SRB-NOW MES-OFF BOFLAR U

(REUE45) ( D4 FEB 75 )

PARAMETRIC DATA

#### REFERENCE DATA

#### SREF = 2690,0000 SQ.FT. XMRF = 976,0000 IN. XT = 80-VJ3 000. ELV-IB = '- REF = 1290.3000 IN. YMRF = .5000 IN. YT RUDDER = .000 MACH = 1.250 GIMBAL = 1.000

320.000 -.2917 -.2636

BREF = 1290.3000 1N. SCALE = .0200	ZMRF = 400.0000	IN. ZT	
SECTION ( 1) BODY PLAP UP	ER DEF	ENDENT VA	RIABLE CF
ALPHA ( 1) = -6.24# BETA	(1) =009	CX IH?	31.100 31.800
			24172428 24172267
ALPHA ( 2) = -3.934 BETA	(1) =009	CX IHe	31,100 31,800
			24332477 24352264
ALPHA ( 3) =309 BETA	(1) = -4.990	XO THT	31.100 31.800
		.000	25202600 25282328
ALPHA ( 3) =360 BETA	(2) = .009	XD PHT	31.190 31.899
		.999	24152466 24392243
ALPHA ( 3) =405 BETA		XO THT	31.100 31.800
		כככ.	25692635 25462419
ALPHA ( 4) = 3.873 BETA	(1) = .000	XS THE	31,100 31,800
	•	.000	26372711 - 26222424
ALPHA ( 5) = 7.989 BETA	(1) = .999	CX	31.100 31.800
			29372993

DATE 33	MAY 75
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Charles Andreas Harris Lander Land Control of the C

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

320.000 -.2054 -.1789

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ARC11-D14TA19 OTS

SRB-NOM MES-OFF BOFLAR U

(REUE46) ( 04 FEB 75 )

#### REFERENCE DATA

 SREF
 =
 2690.0000 SQ.FT.
 XMRP
 =
 976.0000 IN. XT

 LREF
 =
 1290.3000 IN.
 YMRP
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN.
 ZMRP
 =
 400.0000 IN. ZT

 SCALE
 =
 .0200
 IN. ZT

PARAMETRIC DATA

ELV-IB = .999 ELV-OB = .999 RUCOER = .999 MACH = 1.499 GIMSAL = 1.999

SECTION ( 1) BODY PLAP UPPER DEPENDENT VARIABLE CP ALPHA ( 1) = -8.178 BETA ( 1) = .003 ΧO 31.199 31.899 PHI .000 -.1819 -.1865 329.000 -.1849 -.1715 ALPHA ( 2) = -4.99 BETA ( 1) = 1003 31.199 31.899 PHI .999 -.1858 -.1895 320.000 -.1650 -.1699 ALPHA (3) = -.348 BETA (1) = -4.99331.100 31.800 PHI .000 -.1897 -.1948 329,999 -.1916 -.1792 ALPHA ( 3) = -.369 BETA ( 2) = .016 31,199 31,899 X:O .000 -.1841 -.1875 320.000 -.1839 -.1642 ALPHA ( 3) = -.360 BETA ( 3) = 4.028 C:X 31,100 31,800 PHI .999 -.1939 -.1964 329.999 -.1919 -.1739 ALPHA (4) = 3.900 BETA (1) = .006 CX 31.199 31.899 PHI .999 -.1911 -.1951 329,999 -.1919 -.1667 ALPHA ( 5) = 7.653 BETA ( 1) = .006 X:S 31.199 31.899 PHI .000 -.2059 -.2117

FAGE 1138

.000

1,400

ARC11-D14TA19 OTS

SRB-OFF NES-OFF BOFLAF U

(REUE47) ( 04 FEB 75 )

PARAMETRIC DATA

#### REFERENCE DATA

#### 8.000 ELV-08 = ELV-IB = = HOAM CCQ,

SREF = 2690.0000 \$0.FT. XMRP = 976.0000 IN. XT דץ און פפפפי. YMRF = LREF = 1290,3000 IN. ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. .0200 SCALE =

GINBAL = 1.000

RUDDER =

#### DEPENDENT VARIABLE CP

320.000 -.2796 -.2533

SECTION ( 1) BODY PLAP UPPER ALPHA ( 1) = -4.050 9ETA ( 1) = -.003 ΧO 31.100 31.800 FHT .999 -.2775 -.2816 320.000 -.2760 -.2585 31.100 31.800 CX ALPHA (2) = -.155 BETA (1) = -4.900PHI .000 -.2787 -.2785 320.000 -.2754 -.2533 XO 31.100 31.800 ALPHA (2) = -.129 BETA (2) = .009 FHI .000 -.2695 -.2700 329.999 -.2667 -.2437 XO 31.199 31.899 ALPHA (2) = -.234 BETA (3) = 4.028PHI .000 -.2839 -.2897 320.000 -.2855 -.2667 31.199 31.899 ALPHA ( 3) = 3.867 EETA ( 1) = .009 XO CX FHI .000 -.2793 -.2820

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54	TE.	95	MAY	

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1139

1.499

ARC11-0141A19 OTS SER-NOM MES-OFF BOFLAR U

(REUE48) ( 04 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

1,000

8.000 ELV-08 = .000 MACH =

ELV-18 = RUDDER = GIMBAL =

SREF = 2690.0000 10.FT. LREF = 1290.3000 1N. BREF = 1290.3000 1N. SCALE = .0000	דץ או פפפפ. = קאאץ	
SECTION ( 1) BODY FLAP UPPE	R DEFENDENT VA	RIABLE CP
ALPHA ( 1) = -4.145 BETA	FHI	31.100 31.800
	The state of the s	20222064 19951881
ALPHA ( 2) =245 BETA	PHI	31.100 31.800
	•	20222070 20141879
ALFHA ( 2) =324 BETA	PHI	31.190 31.899
		20202066 20061853
ALFHA ( 2) =435 BETA	(3) = 4.025 XD PHI	31.100 31.800
		20362088 20041899
ALPHA ( 3) = 4.032 BETA	CX 200,- = (1)	31.100 31.800
		20702102 20601841

4,000

.900

ARC11-D141A19 DTS SRB-OFF MES-OFF BDFLAF U

(REUE49) ( 04 FEB 75 )

PARAMETRIC DATA

1.000

E V-IB =

RUDDER =

# 80-V\_J3 000.8

# HACH =

#### REFERENCE DATA

SECTION ( 1) BODY FLAP UPPER

SREF = 2690.0000 \$0.FT. XHRP = 976.0000 IN. XT דץ און פפפפ. ב קאוץ LREF = 1290.3000 N. ZHRP = 400,0000 IN. ZT 9REF = 1290.3000 N. בפפני. SCALE =

GIMBA\_ =

DEPENDENT VARIABLE CP

31.100 31.800 ΧĐ ALPHA ( 1) = -4.041 BETA ( 1) = .000 PHI .000 -.2288 -.2378 320,000 -.2337 -.2311

31,100 31,800 ALPHA ( 2) = -.198 BETA ( 1) = -4.003 PHI

.000 -.2322 -.2413 320.000 -.2280 -.2291

31,100 31,800 ΧO ALPHA ( 2) = -.162 BETA ( 2) = .009 PHI

.000 -.2267 -.2319 320.000 -.2285 -.2164

31.100 31.800 ΧO ALPHA ( 2) = -.285 BETA ( 3) = 4.022 PHI

.000 -.2357 -.2412 320.000 -.2357 -.2321

31,100 31,800 ΧO ALPHA ( 3) = 3.828 BETA ( 1) = -.003

PHI .000 -.2179 -.2250 320.000 -.2167 -.2103



STAC



03 4AY 75	TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-0)	14 )

PAGÉ 1141

4.000 1.100

(REUESO) ( 04 FEB 75 )

# 80-VJE 000.8

- HOAP CCC.

PARAMETRIC DATA

1.000

										-					
			REF	Eqt	ACE DA	TA:								•	
SREF	=	269		10 <b>\$</b>	g.FT.	X	<del>(</del> P		97	6.9999	IN. XT	•			. SLV-18 =
REF	=	129	9.399	ול כו	Ν.	Υt	461	2	:	.0000	IN. YT				RUDDER =
BREF	=	129	9.399	i cu	N.	21	456	=	49	מככם, ב	IN. ZT				GIMBAL =
			.020												
SECT	ION	( 1	1800	r Pi	AP UFF	ER				DEF	ENDENT VA	RIABLE C	•		
ALPHA		1) :	: -4.!	317	BETA	(	1)	=	.003	,	СХ	31.199	31.899		
											PHI				
											.000	3537	3582		*
											320.000	3542	3372		
ALFHA	(	2) :	=	162	BETA	(	1)	= -	4 .999		CX IHR	31.199	31.899		
											.000	3894	3981		
				•								3867			
ALFHA	(	2) :	=	141	BETA	(	2)	=	.012	<b>!</b> .	XO THE	31.100	31.899	-	
5											.999	3498	3477		
								•			320,000	3416	3234		
ALPHA	(	2) :	<b>-</b> :	234	BETA	(	3)	=	4.025	i	XO PHI	31.100	31.800		•
											.999	3757	3802		
											329.999	3753	3693		
ALPH4	. (	3) :	= 3.	879	BETA	(	1)	=	.000	)	CX THF	31.100	31.800		
											.999	3963	3934		

ARC11-014TA19 DTS SRB-OFF MPS-OFF BDFLAF U

320.000 -.3891 -.3657

FAGE 1142

ARC11-014TA19 OTS

SRB-OFF MES-OFF BOFLAF U

(REUE51) ( 04 FEB 75 )

#### REFERENCE DATA

# SREF = 2699.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290.3000 IN. YMRF = .0000 IN. YT BREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT SCALE = .0200

# FARAMETRIC DATA

ELV-IB =	8.999	ELV-08 =	4.000
QUODER =	פפפ.	MACH =	1,250
GIMBA =	1.000		

30120	7.7			
SECTION ( 1	DEDOY PLAP UPPE	R	DEPENDENT VAR	TABLE CF
ALPHA (1) =	-4.99 BETA	(_1) =3000	XO THE	31.100 31.800
				29803005
				29982817
ALPHA ( 2)	=138 BETA	(1) = -4.993	CX IH3	31.100 31.800
			פפס.	31983258
				31402945
ALFHA ( 2)	=22 BETA	(2) = .009	XO PH <b>I</b>	31.190 31.890
		•	.000	30493063
4			320.000	39392858
ALFHA (2)	=252 BETA	( 3) = 4.922	XO PHI	31.100 31.800
			.000	31823246
			320.990	31633059
ALPHA ( 3)	= 3.864 BETA	(1) = .000	CK IH <del>1</del>	31.100 31.800
			.000	33363378
			329.999	33593151

# DATE 03 MAY 75 TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

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4,999

ARC11-0141A19 OTS SRB-OFF MRS-OFF BDFLAF U (REUES2) ( 04 FEB 75 )

.000 MACH = 1.400

#### REFERENCE DATA

#### FARANETRIC DATA

8.999 ELV-08 =

E\_V-18 =

RUDDER =

GINBA'\_ = 1.000

SQEF = 2690.0000 SQ.FT. XMQP LQEF = 1290.3000 IM. YMQP BQEF = 1290.3000 IN. ZMQP	I JOON IN VI
SCALE = .0200	-
SECTION ( 1) BODY PLAP UPPER	DEPENDENT VARIABLE CF
ALPHA (1) = -3.993 BETA (1) :	= .999 XO 31.199 31.899 FHT
	.00027052783 320.00026662522
ALPHA (2) =19 BETA (1) =	-4.003 XO 31.100 31.800 PHT
	.99928112826 329.09927732551
ALPHA (2) =19 BETA (2) =	009 XO 31.100 31.800 PHI
	.99926882796 329.99926742474
ALPHA ( 2) =196 BETA ( 3) =	4.022 XO 31.100 31.800 FHI
	.00028682874 320.00028632620
ALPHA (3) = 3.960 BETA (1) =	.000 XX 31.190 31.890
	.90027592774 329.93027362497

PAGE 1144

4.000

. 900

ARC11-0141A19 OTS

SRE-NOW MES-OFF BOFLAF U

(REUE53) ( 94 FEB 75 )

MACH =

#### REFERENCE DATA

#### FARAMETRIC DATA

.000

# 80-VJ3 CCC.8

E\_V-18 =

RUDDER = .000 GIMBA = 1.000

entt	- 2500	anch s	n et	YMER	- (	76 .0000	TN. YT		
			-	-		-			
						0000.			
-			N.	ZME	= '	מממני, מפו	IN. ZI		
SCALE	=	.0200							
SECT	10H ( 1)	BOOY FL	AP UPP	Eq		DEP	ENDENT V	IRTABLE CI	a ,
ALPHA	(1)=	-4.179	BETA	(1) =	09	13	XO THT	31.199	31.899
								2512	0640
							.000		2612
							ניניני. נישכ	2543	25%
ALPHA	(2) =	33\$	BETA	( 1) =	-3.99	7	XO IHq	31,100	31.600
							•	2437	2556
								2459	
ALPHA	(2) =	365	BETA	(2) =	.01	2	κo	31,199	31.890
					- / -	_	FHI		
								2162	2236
							320,000	2280	2124
							,		
ALPHA	( 2) =	411	BETA	(3) =	4.02	?2	XO FHI	31.109	31.899
							.999	2498	2506
							320,000	2435	2491
								, ,	
ALPHA	(3) =	3.936	BETA	( 1) =	09	16	ΧO	31.199	31.890
				•		•	PHI		
							.000	2191	2178
	•		,				320.000	2158	2080

 -	 78

# TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1145

4.999

1.199

ARC11-0141A19 OTS

SEB-NOW MES-OFF BOFLAR U

(REUE54) ( D4 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

.ממם.

1.000

6.000 ELV-08 =

ELV-IB = RUCCER = GIMBAL =

-									•	•	
SREF	=	2690	,0000	SQ.FT.	XMQ	; =	976	מבכב.	IN. XT		
REF	=	1290	.3000	tu.	YME	; ;	:	ככככ.	IN. YT		
BREF	=	1290	פפפנ.	tn.	ZMR	: :	400	מבכפ.	IN. ZT		
SCALE	=		.0200								
SECT	TON	(.,1)	восу	PLAP UPP	ER			DEP	ENCENT VA	RIABLE C	
ALPHA	(	1) =	-4.14	BETA	(1)	=	.סָכָם		XD PHI	31,199	31.890
										3372	3370
										3376	
ALP4A	(	2) =	31	S BÉTA	(,1)	2 -	4 .003		CX THE	31.100	31.900
				. •						3630	3692
			•							-,3577	
ALFHÁ	. '(	2) =	32	7 BETA	( 2)	2	.995		XD 541	31.100	31.800
									.000	3231	3328
									329.999	3241	3109
ALPHA	. (	2) =	28	8 BETA	( 3)	= 1	4.016		XO FHT	31.190	31.899
									.000	3457	3497
									329.999	3459	3288
ALPHA	•	3) =	3.91	5 BETA	( 1)	=	003		XO THE	31.199	31.890
										3619	3676
٠.				1.						3616	

4.099

1.250

ARCII-DI4IAI9 OTS

SRB-WOM MES-OFF BOFLAR U

(REUESS) ( 94 FEB 75 )

MACH =

#### REFERÈNCE DATA

#### PARAMETRIC DATA

.000

1.000

ELV-18 =

RUDDER = GIMBAL =

9.000 ELY-08 =

SREF	3	2699	.סססס	∮q.FT.	XMRP	= 976	.0000 IN. XT		
LREF	3	1290	.3000	IN.	YMRF	=	.0000 IN. YT		
BREF	=	1290	.3000	ÎN.	ZMRP	= 499	.0000 IN. ZT		•
SCALE	#		.0200				THE LINE EN		
SECT	NC1	(1)	BODY F	LAP UPP	ER		DEPENDENT V	ARTABLE C	
ALPHA	( )	1) =	-3.981	ETA	( 1) =	.000	XO PHI	31 .199	31.899
							.000	2555	2595
								2556	
ALPHA	( 2	<b>?</b> ) =	369	BETA	(1)=	-4.000	CX IH9	31.100	31.800
							.000	~,2692	2732
								2671	
ALPHA,	( 2	<del>!</del> ) =	309	BETA	(2) =	.012	XO THP	31.199	31.800
							.000	2553	2607
							329,999	2567	2499
ALPHA	( 2	) =	399	BETA	( 3) =	4.022	XO FHI	31.199	31.800
							.999	2686	2774
								2645	
LEHA	( 3	) = '	3.966	BETA	(1) =	.003	XO FHI	31 . 100	31.899
							.999	~.2850	2903
				1.			329,999		2685

PAGE 1147

4.999

1.408

ARC11-014TA19 OTS

SRB-NOM MPS-OFF BOFLAR U

(REUES6) ( 94 FEB 75 )

MACH =

#### REFERENCE DATA

#### FARAMETRIC DATA

.000

1.999

8.999 ELV-08 =

ELV-18 = RUDDER = GIMBAL =

REF	=	5690	מככב.	SQ.FT.	XMQP	Ξ	976.0000	IN. XT		
REF	=	1290	פפפנ.	tn.	YMEF	=	.0000	TN. YT		
REF	=	1290	.3000	IN.	ZMRP	=	400.0000	IN. 7T		
CALE	=		.0200							
SECTI	ON	( 1)	SOCY P	LAP UPP	ER		DEF	ENDENT VA	RIABLE C	<b>.</b>
LPHA	( 1	) = -	4.07	BETA	(1) =	· 4	.000	CX IHT	31.100	31.890
							•	. 999	1989	2074
										1899
PHA	( 2	2) = ·	294	BETA	( 1) =	-4 -	999	XO PH1	31.190	31.899
								. מכים	2903	2955
					٠.			320.000	2915	1879
FHA	( 2	) =	375	BETA	( 2) =	٠.	909	CX THT	31.190	31.899
								.000	2077	2069
								320,999	2078	1897
PHA	( 2	) =	423	BETA	( 3) =	4.	028	XO THE	31.100	31.890
								.000	2938	2069
	•							320.000	1983	~.189î
PHA	<b>( 3</b>	) =	3.634	BETA	(1)=		203	XO FHT	31.100	31.899
•								.999	2962	~.2093
								329.999		

4,000

ARCII-DIATAIO OTS+STRUT SRB-NOM+NFS-NOM+BDFLAF U

(REUEST) ( 04 FEB 75 )

## REFERENCE DATA

# FARAMETRIC DATA

.000 1.000

ELV-18 =

RUDDER =

SREF = 2690.0000 Sq.FT. XMRP = 976. LREF = 1290.3000 IN. YMRP = SREF = 1290.3000 IN. ZMRP = 400. SCALE = .0200	.0000 IN. YT
SECTION ( 1) BODY PLAP UPPER	DEPENDENT VARIABLE CP
ALEHA (1) = -4,499 - 9ETA (1) = .003	XO 31.199 31.899 PHI
	.00033783704
	322.00034683711
ALPHA (2) =339 BETA (1) = -3.997	XO 31.199 31.899 PHI
	.99937334964
	320.00038184054
ALPHA (2) =465 SETA (2) = .019	XO 31.100 31.800 FHI
	.99935183853
	320.00035083779
ALFHA (2) = -,435 SETA (3) = 4.031	XO 31.199 31.899
	,99937384131
	320.00037084038
ALFHA ( 3) = 3.636 ÆTA ( 1) = .003	%O 31.199 31.899 PHI
	.99936684917
	320.00036153908

#### DATE DO MAY 75 TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1149

ARC11-D14TA19 OTS+STRUT SRB-LOW MFS-NOM BDFLAF U (REUESB) ( D4 FEB 75 )

#### REFERENCE DATA

## PARAMETRIC DATA

		2690.0000 3Q.FT. 1290.3000 IN.	XMRP		976.9990 IN. XT		ELV-IB = RUCCER =	8.999 999	ELV-OB = NACH =	4,999 1,499
BREF	=	1290.300d IN.	ZMRF	=	400.0000 IN. ZT		GINBAL =	1,999		
SCALE	=	. กรกส								

SECTION ( 11800Y PLAP UPPER	DEPENDENT VARIABLE CF				
ALPHA ( 1) = -4.196 BETA ( 1) = .000	XO PHI .999 200.095		3030		
ALPHA (2) =348 BETA (1) = 4.928	XO FHI	31.199	31.899		
	.000	3004	3297		

4,000

1.259

ARC11-0141A19 OTS+STRUT SRB-NOW MES-OFF BDFLAR U

320,000 -.2831 -.2850

(REUES9) ( 94 FEB 75 )

MACH =

#### REFERENCE DATA

#### PARAMETRIC DATA

.000

1,000

8.000 ELV-08 =

SREF	•	2690	. 2222	SQ.FT.	XMRF		976.	ככככ	IN. XT			•	E V-16	3 =
				IN.							198		RUCCER	
BREF							400.5						GINBAL	•
SCALE			. 020ე		Ç13 V		4351,	ددد	111. 21			•	GINDAL	•
					_ +									
SECT	ION	(1)	י אסכנ	LAP UPP	ER			DEFE	INDENT V	ARIABLE O	3			
ALPHA	C	D = -	4.58	BETA	(1)	=	.012		CX	31.190	31.899			
									PHI	2500	0000			
										2599				
									250.000	2599	2627			
ALPHA	( 2	?) =	37	BETA	( 1)	•	.012		ΧЭ	31,199	34 600			
						_	10.6		PHI	211155	311000			
									מממ	-,2538	2556			
									320.000	-:2552	2551			
			•					-						
ALPHA	( 2	) =	33	BETA	(2)	= .	4.031		ΚΌ	31.199	31.800			
		• • • •							PHI					
									.ססס	2843	28%			

DATE 03 MAY 75 TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1151

4.000

1.250

ARC11-014TA19 OTS+STRUT SRB-HT MFS-NON BOFLAP U

(REUEGO) ( 04 FEB 75 )

REFERENCE DATA

FARAMETRIC DATA

8.999 ELV-08 =

SREF	=	2690,0000 SQ.FT.	XMER	=	976.9999 IN. XT	
LREF	=	1290.3000 IN.	YMRF	=	.9999 IN. YT	
BREF	3	1290.3000 IN.	ZMRP	=	499.9990 IN. ZT	
	_					

RUDDER. = MACH = פפפ. GINBAL = 1.000

ELV-18 =

SCALE =

DEFENDENT VARIABLE CP

ALPHA ( 1) = -4.122 SETA ( 1) = .012

SECTION ( 1) BODY FLAP UPPER

31.100 31.800 CX

PHI

.000 -.2918 -.3316 329.999 -.3974 -.3384

.900

ARC11-014TA19 OTS+STRUT SRB-OFF NPS-OFF BOFLAP L (REUFOL) ( 04 FEB 75 )

#### REFERENCE DATA

SAEF = 2690.0000 SQ.FT. XNRP = 976.0000 IN. XT LREF = 1290.3000 IN. TY .WI CCCC. = SAMY BREF = 1290.3000 IN. ZMRF = 400,0000 IN. 2T

8.000 ELV-08 = EL V-18 = RUDDER = .000 MACH = GIMBAL = 1.000

PARAMETRIC DATA

SCALE = DEPENDENT VARIABLE CP SECTION ( 1)800Y PLAP LOWER ALPHA (1) = -3.995 BETA (1) = .000 XO 31.100 31.800 .000 -.2998 -.2821 329,999 -.2649 -.2539 X3 31.190 31.899 ALPHA ( 2) = -.210 BETA ( 1) = -4.006 .000 -.3008 -.3055 320.000 -.2653 -.2548 XD 31.199 31.899 ALPHA (2) = -.336 BETA (2) = .006 .000 -.2820 -.2698 320.000 -.2394 -.2303 XO 31.199 31.899 ALFHA ( 2) = -.222 BETA ( 3) = 4.025 PHI .000 -.2917 -.2769 320.000 -.2596 -.2475 XD 31.199 31.899 ALPHA (3) = 3,948 BETA (1) = .000 PHÍ .000 -.2697 -.2461 320.500 -.2261 -.2224

FAGE 1153

## ARC11-014IA19 OTS+STRUT SRB-OFF MPS-OFF BDFLAF L

(REUFO2) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

1,000

8.000 ELV-08 = .000 MACH =

ELV-IB = QUOCER = GIMBAL =

SREF = 2690.0000 SQ.FT. XMRF =	976.0000 IN. XT
LREF = 1290.3000 IN. YMRF =	דץ או פפפפ.
BREF = 1290.3000 IN. ZMRF =	400.0000 IN. ZT
SCALE = .0200	·
openion and an Arrivan	
SECTION ( 1)BODY PLAN LOWER	DEPENDENT VARIABLE CP
ALPHA ( 1) = -4.178 BETA ( 1) = .	000 XO 31,100 31.800
	PH <b>I</b>
	.00035963606
	329.99931773258
ALPHA ( 2) =294 BETA ( 1) = -4.	993 XO 31.199 31.899
	PHI
	.99934353498
	320.00033433498
ALPHA (2) =25 BETA (2) = .	009 XO 31.199 31.899
	PHI
	.00034013439
	329.99929383199
	•
ALPHA ( 2) =225 BETA ( 3) = 4.0	
	FHI
	.09935963443
	320,00030903269
ALPHA ( 3) = 4.026 BETA ( 1) = .0	999 XO 31.199 31.899
	FHI 31.033
	.99935953652
	320.00029933206
	12333 -13630

4,000

1.250

ARC11-014TAT9 OTS+STRUT SRB-OFF MES-OFF BDFLAP L

(REUFOS) ( 94 FEB 75 )

ELV-08 =

MACH =

#### REFERENCE DATA

#### PARAMETRIC DATA

8.000

.000

1.000

SREF = 2690.0000 SQ.FT. ) LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0000		IN. YT	ELV-18 = RUDDER = GIMBAL =
SECTION ( 1)BODY FLAP LOWER	DEFE	NOENT VARIABLE CF	
ALPHA ( 1) = -4.182 BETA (	1) = .903	CR 21.100 31.890	
	•	.00027982812	
	•	320,00025692644	-
ALPHA ( 2) =291 BETA (	1) = -3.997	XO 31.100 31.800 PHI	
		.00025892627	
	:	320.00026142778	
ALPHA ( 2) =17 BETA (	2) = ,016	XO 31.100 31.800 PHI	
		.00028652908	
	;	320.000 -,24752525	
ALPHA ( 2) =368 BETA (	3) = 4.031	XO 31.100 31.800 THE	
		.909 -,26972459	
· ·		320.00023932442	
ALPHA ( 3) = 5.845 BETA (	1) = .003	XO 31.100 31.800 PHI	
		.00028442935	
		520.00024312483	

DATE OS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1155

4.999

1.400

ARC11-0141A19 OTS+STRUT SRB-OFF HES-OFF BOFLAP L

(REUFO4) ( 04 FEB 75 )

MACH =

#### REFERENCE DATA

## FARAMETRIC DATA

.000

1.999

8.999 ELV-OB =

ELV-IB =

RUDDER = GINBAL =

				2212	_								
					SQ.FT.							•	
					IN.								
**					ÍN.	ZM	₹15	Ξ	499.	ככככ	IN. ZT		
SCALE	=			.0200									
SECT	NCI	ţ	1)[	300y F	LAP LO	ÆR				DEPE	ENDENT V	ARTABLE C	<b>B</b>
ALFHA	ή.	1)	=	-3.9¢	BETA	( 1	) =		.009		хЭ	31.199	31,800
											FHI		
											. 222	2584	2622
											329.999	2590	2461
ALPHA	C	2)	=	24	BETA	( 1)	) =	-4	.000		ХЭ	31 .199	31.899
•	•										FHI		
			1								.000	1851	1866
											320.000	~.2237	2470
ALFHA	(	2)	=	39	BETA	( 2)	=		.016		ΧΌ	31.100	31.899
											PHI		
											, 999	2361	2413
											329.999	2133	2219
ALPHA	( )	2)	=	20	BETA	( 3)	=	4	.031		XO	31.199	31.899
											FHI		
											.000	1950	1910
	•				•	,				:	329,099	2117	2027
ALPHA	( )	3). :	=	4.39	BETA	(1)	=		.012		СX	31.190	31.899
											PHI		
											.999	2991	2123
										٠.	non ner	1892	- 2014

ARCI1-014TA19 OTS+STRUT SEB-NON MES-NON BOFLAF L

(REUFOS) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

.000 1,000

ELV-19 = RUDDER =

GIMBAL =

SREF = 2690.0000 Sq.FT. XMRF = 976	
LREF = 1290.3000 IN. YMRF =	.0000 TN. YT
BREF = 1290,3000 IN. ZMRP = 400	וו פפפפ, (מו פפפפ,
SCA'_E = .0200	
SECTION ( 1)BODY FLAF LOWER	DEPENDENT VARIABLE CF
ALPHA (1) = -4.119 BETA (1) =006	XO 31,100 31,800 FHI
	.00033333215
	320,00032083234
ALPHA (2) =300 BETA (1) = -4.900	XO 31.100 31.890 PHI
	.00031533390
	320.00034723551
ALPHA (2) =264 BETA (2) = .016	XO 32.100 31.800 PHI
	.00033553130
	320.00030283261
ALPHA (2) =348 BETA (3) = 4.928	XO 31.100 31.800 PHI
	.00035443480
	329.00032623338
ALPHA ( 3) = 3.924 BETA ( 1) = .000	XO 31.100 31.800
	.00029832907
	320.00028032924

DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1157

1.199

ARC11-0141A19 OTS+STRUT SRB-NON NES-NON BOFLAR L

(REUFO6) ( 04 FEB 75 )

REF	ERE	NCE	DA	ĮΑ.

#### PARAMETRIC DATA

1,000

8.000 ELV-08 = .000 MACH =

ELV-18 = RUDDER = GIMBAL =

SREF	=	269	9,0000 9	SQ.FT.	XMRF	=	976	ַ מַמַמַנוּיַ	IN.	XT		
			0.3000									
BREF	=	129	0.3000	IN.	ZMRF	=	400	פפפפ.	în,	ZŤ		
SCA'_E			. ၁၃၁၁									
SECTI	l Dri	( 1	BOOY F	AP LOW	ER		•	DEF	M <b>3C</b> N	IT VA	RIABLE C	P
ALPHA		1) =	-4.074	BETA	(1)	=			ХЭ		31,199	31.899
				•					PHI			
										999	3397	3442
								•	320	000	3229	3508
ALPHA	(	2) =	394	BETA	(1)	= -4	.993				31.199	31.899
					•				PHI			
										999	3123	3117
									320.	כככ	3201	3469
ALPHA	(	2) =	456	BETA	( 2)	=	.009		CX		31,100	5%.800
		•							PHI			
		•								999	3120	3195
									329 .	999	2892	3299
ALPHA	(	2) =	339	BETA	( 3)	= 4	.926		ХЭ		31.199	31.899
									PHI			
										מפפ	3230	3965
			•						329.	999	2939	3224
ALPHA	(	3) =	3.984	BETA	( 1)	=	.993		XO FHI		31.190	31.899
										999	3249	3369
											-,2997	
			• 1						320.	999	2997	332

ARC11-0141A19 OTS+STRUT SEB-NOW MPS-NOW BOFLAF L

(REUFO7) ( D4 FEB 75 )

#### REFERENCE DATA

## ELV-IB = 8.000 ELV-08 = 4.000 RUDDER = ...000 MACH = 1.250 GIMBAL = 1.000

PARAMETRIC DATA

DEFENDENT VARIABLE CF  VARIANCE CE DEFENDENT VARIABLE CF  XD 31.100 31.800 FHI FHI FINATION (1) = -4.131 BETA (1) = .003 FHI FINATION (2) = .2330 BETA (1) = -4.000 FINATION (2) = .300 BETA (1) = -4.000 FINATION (2) = .31.800 FINATION (2) = .31.100 31.800 FINATION (2) = .411 BETA (2) = .012 FINATION (2) = .411 BETA (2) = .012 FINATION (2) = .411 BETA (3) = 4.031 FINATION (3) = .236 FI	REF	=	12	99. 99.	3000	sq.ft. In. In.	YME	=		בככב.	IN. YT		
FHI  .000	SECT	iò	ı Ç	1)5	SODY F	LAP LOW	ER			DEFI	ENDENT VA	RIABLE CF	
ALFHA (2) =300 BETA (1) = -4.000 XO 31.800 31.800 FHI	U_FHA	(	1)	= -	4.131	BETA	(1)	=	.003		-	31.199	31.899
ALFHA (2) =300 BETA (1) = -4.000 XO 31.100 31.800 FHI											.000	2339	2336
FHI .00019791994 320.000 31.800  ALFHA (2) =41 BETA (2) = .912						•					320.000	2265	2497
320.00021332367  ALFHA (2) =411 BETA (2) = .012	LPHA	(	2)	=	39	BETA	(1)	= -	4 .999		PHI		
ALPHA (2) =41 8ETA (2) = .912 XO 31.199 31.899  PHI .09022642296 329.00020902338  ALPHA (2) =43 8ETA (3) = 4.931 XO 31.100 31.890  PHI .09021911978 320.00021932293  ALPHA (3) = 3.562 8ETA (1) AT38 8ETA (3) = .23322396											.000	1979	1994
FHI .00022642296 320.0022642296 320.002338  ALFHA (2) =436 BETA (3) = 4.031											329,999	2133	2367
320.00020902338  ALFHA (2) =436 BETA (3) = 4.031	ALPHA	ί.	5)	=	41	BETA	( 2)	=	.912			31.199	31.899
CR. 15 CO. 15 CO. 15 CO. 2 (1) AT38 BET. 2 (2) AHALA (2) =436 BET. 2 (2) AHALA (2) =436 BET. 2 (2) AHALA (2) =21911978 BET. 2000.000 GET. 2000.000 GET. 2000.000 GET. 2000.000 GET. 2000.0000  GET. 2000.00000 GET. 2000.00000 GET. 2000.00000 GET. 2000.000000 GET. 2000.00000 GET. 2000.00000 GET. 2000.00000 GET. 2000.000000 GET. 2000.00000 GET. 2000.00000 GET. 2000.00000 GET. 2000.000000 GET. 2000.00000 0 GET. 2000.000000 GET. 2000.000000 GET. 2000.000000 GET. 2000.00000 GET. 20											.000	2264	2296
THI											329.999	-,2090	2338
282 2012 202.00 - 2128 282 201.10 CX	ALPHA	(	2)	=	43	<b>BETA</b>	( 3)	=	4.931			31.100	31.890
CR.15 CX 500. = (1) AT38 \$83.5 = (5) AH3_A FHI 		•											
PHI .00023322396											333.999	2199	2293
	ALPHA	. (	3)	= "	3,58	BETA	(1)	=	.993			31.100	31.890
320,00021302324											.999	2332	2396
											320.000	2139	2324

ARC11-0141A19 OTS+STRUT SRB-NOW MES-NOW BOFLAP L

(REUFO7) ( D4 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

בפפ.

1.000

= 80-V\_08 =

ELV-TB =

RUDDER =

GIMBAL =

SMEF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	TY .NI CCCC. = TSMY	
SECTION ( 1) BODY FLAP LOW	ER DEPENDENT VA	RIABLE CF
ALFHA ( 1) = -4.131 BETA	CX	31.100 31.800
	.000	- 2339 - 2336
•		22652497
ALPHA ( 2) =300 BETA	(1) = -4.000 XO PHI	31.190 31.899
	.000	19791994
	320.000	21332367
ALPHA ( 2) =41 BETA	(2) = .012 XO FHI	31.100 31.800
	.000	22642296
	320.00	20902338
ALPHA ( 2) =438 BETA	PHI	31.100 31.800
	.000	21911978
		21992283
ALPHA ( 3) = 3,582 BETA	CX EEC. = (1)	31.100 31.800
	.900	23322396
		21392324

P.A	TF	0.3	MAY	74

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-914 )

PAGE 1159

4.000

1.499

#### ARCII-DIATAIS OTS+STRUT SRB-NOM NES-NOM BDFLAF L

(REUFOS) ( D4 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

פכפ.

1.000

							976, 0000					ELV-IB =
LREF	=	1297	י פפפנ.	IN.	AMEL	=	בפפפ.	IN. YT				RUDDER =
BREF	=	1297	י פפפל.	IN.	ZMRF	=	499.9999	IN. ZT				GI!ABAL =
SCALE	=		.0200		•			•				
SECT	TON	( 1)	900y FI	AF LOW	ER .		DEF	ENCENT VA	RIABLE C	F	•	
ALPHA	•	1) =	-4.017	BETA	(1)	=	.996	XO FHI	31.199	31,899		:
								. 999	1717	1751		
•							•	320.000	1708	1913		
ALPH		<b>2)</b> =	45	BETA	(-1)	= -4	.999	XO FHT	31.199	31.890		
								.999	1327	1231		
			•					329.999	1529	1717		
ALPHA	(	2) =	43 <b>É</b>	BETA	( 5)	=	.016	CX THE	31,190	39,800		
								, 999	1539	1532		
								329.999	1499	1735		
ALPHA	(	2) =	450	BETA	( 3)	= 4	.028	XO PHI	31.100	31.899		•.
								מממ,	1501	1336		
						-		329,999	1439	1679		
ALPHA	(	3) =	4.914	BETA	(1):	•	.009	CX TH <sup>4</sup>	31.100	31.899		• .
								.000	1398	1491		
								329.999	1337	1616		

.900

## ARC11-014TA19 OTS+STRUT SRB-LOW MES-NOW BOFLAP L

(REUFOS) ( 04 FEB 75 )

MACH =

#### REFERENCE DATA

#### PARAMETRIC DATA

8.000

,000 1,000

ELV-18 = RUDDER = GIMBAL =

LREF	=	12	90 90	.000E,	SQ.FT. IN. IN.	YMR	F	=		פפפפ.	IN. YT			
SECTI	lok	Ċ	1) 5	YOCK	LAP LO	Eq				DEF	ENDENT V	ARTABLE CI	:	
ALPHA	Ċ	1)	= -	4.19	BETA	(1)	=	.0	פפנ		XO PHI	31,100	31.899	
											.ססמ	3219	3157	
											320,000	3293	3363	
ALPHA	(	2)	=	4\$	BETA	( 1)	=	-4 .0	199		CX THT	31.100	31.800	
											.000	2989	3367	
											320.000	3383	3442	
ALPHA	(	2)	=	54	BETA	( 2)	=	0	103		XO PHI	31.199	31,899	
											.000	-,2700	2676	
											320.000	2698	2825	
ALPHA		2)	=	44	BETA	( 3)	=	4.0	25		XO FHI	31.100	31.890	
											.000	2919	2893	
											320.000	2910	2783	
ALPHA	(	3)	=	4.9%	BETA	( 1)	2	.0	996		XO PHI	31.100	31.899	
											.000	2706	~,2509	
											329.999	2599	2699	



()

( AFC 11-DIA ) PIAT - ATAC SPURSESPE STRUCE CSTALUEAT

PAGE 1161

## ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOW BDFLAF L

(REUF10) ( 04 FEB 75 )

REF	EREN	KE.	DATA
-----	------	-----	------

DATE OF MAY 75

#### PARAMETRIC DATA

1.000

.000 YACH =

ELV-18 = RUDDER = . GINBAL =

				1.4					
SREF	3 20	590.0000	SQ.FT.	ЧРМХ	=	976,000	IN. XT		
DEF	- 41	PON BOOD	TN.	Y MRF	=	.999	IN. YT		
leff	2 12	מתחד תפי	TN.	ZMRP	=	400,000	IN. ZT		
		.0200				<b>V</b> -			r
SECT	ION (	118007	FLAF LOW	ER		DE	ENDENT VA	RIABLE C	•
alfha	(1)	= -3.97	BETA	(1) =	: •	.996	XO FHI	31.199	31.800
		•					.999	3590	~.3693
•	•	* *						~.3332	
alpha	( 2)	=38	DETA	(1);	: -4	.003	cx	31 .100	31.890
							PHI		
						*	.999	3325	3396
		•					329.999	3331	3654
alpha	( 2)	=42	BETA	( 2)	•	.909	XO FHI	31.199	31.899
							,999	3325	3428
		* * *					320.999	3045	3460
ALPHA	( 2)	=36	BETA	( 3) :	: 4	.928	PHI	31.199	
							.999	3460	3282
							320,000	3098	3384
alfha	( 3)	= 3.93	6 BETA	(1)	=	.999	XO PHI	31.100	31.890
							.000	3520	3716

DA.	ΤĒ	93	MAY	75

## TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

FAGE 1162

4.000

1.250

ARC11-014TA19 OTS+STRUT SRB-LOW MES-NOW BOFLAR L

(REUF11) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

## PARAMETRIC BATA

בפפ.

1.000

= 8C-V\_3 CCC.6

ELV-18 = RUDDER = GIMBAL =

SPEF = 2	690.0000 Sq.FT.	XMRP = 976.	9990 IN. XT	
BREF = 1	299.3000 IN.	ZMRF = 400.	nono in er	
SCALE =			333 144 21	
SECTION (	1) BODY FLAF LO	ÆR	DEPENDENT VAR	TABLE CF
ALPHA ( 1)	= -4.746 BETA	(1) = .096	CX IHR	31,190 31,899
	•		.000	25462528
	• .		320,000	24692679
ALFHA ( 2)	=444 BETA	(1) = -4.000	CX PHI	31.100 31.800
	• •			22572241
			320.000	23802648
ALPHA ( 2)	=402 BETA	(2) = .012	XO S PHI	31.100 31.800
				25082637
			320,000	23152565
ALPHA ( 2)	=324 BETA	(3) = 4.034	XO S PHI	1.100 31.800
	•	•	.000	22642132
			329.999	21462293
ALPHA ( 3)	= 3.550 SETA	(1) = .993	XO 3	1.100 31.990
			.000	25272649
			320.000	22752484

DATE 03 HAY 75

## TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-D14 )

PAGE 1163

4.999

1,499

ARCII-DIAIAIA DIS+STRUT SRB-LOW MES-NON BOFLAP L

(REUF12) ( 04 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

פפפ.

1.999

= 80-V\_08 =

ELV-IB =

RUDDER =

GIMBAL =

SREF = 2690.0000 SQ.FT.	XMRF = 976,00	99 IN. XT	
LREF = 1290.3000 IN.	YMRF = 19MY	לא או פפ	
BREF = 1290.3000 IN.	ZMRF = 400.00	99 IN. 2T	
SCALE = .D2DD			
SECTION ( 1) BODY FLAR LOW	ÆR D	EPENDENT VARIA	IBLE CF
ALPHA ( 1) = -4.122 BETA	(1) = .999	XO 31 FH1	.199 31.899
		.000 -	.20522160
		320.999 -	.20122188
ALPHA ( 3) =396 BETA	( 1) = -4.533	XO 31	.199 31.899
		.999 -	.15181495
		329.999 -	.18832107
ALFHA ( 2) =378 BETA	(2) = .906	XO 31 PHI	.199 31.899
		.999 -	.18121889
		320.000 -	.17441999
ALPHA ( 2) =31\$ BETA	(3) = 4.025	. XO 31: PHI	.199 31.899
		.993 ~	.16171557
		329,999 -	.16011769
ALPHA ( 3) = 4.00\$ BETA	( t) = .000	XO 31 PHI	.190 31.899
		.999	.16291620
•		329,999 -	.15271829

ARCTI-DIATATE OTS+STRUT SEB-NON MES-OFF BOFLAF L

(REUF13) ( 04 FEB 75 )

#### REFERENCE DATA

SREF	=	2690.0000	SQ.FT.	XMRP	=	976.0000 IN.	ΧŤ
		1290.3000		YMRP	=	או פפפפ,	
BREF	=	1290.3000	IN.	ZMRF	Ŧ	400,0000 IN.	ZT
SCALE	ŧ	.0299					

## PARAMETRIC DATA

ELV-18 =	8.000	ELV-OB	=	4.999
RUDDER =	.000	MACH	=	.999
IMBAL =	פַנְיָם, וַ			

#### SECTION ( 1) BODY FLAP LOWER

#### DEPENDENT VARIABLE CP

SECTION CANDOL CHE COMME	-		
ALPHA ( 1) = -4.119 BETA ( 1) =003	XÓ 31.100 31.800 PHI		
	.000 ~.3201 ~.3094		
	320.00029122767		
ALPHA ( 2) =390 BETA ( 1) = -3.997	XO 31.100 31.800 PHI		
	.00031573212		
	320.00028042726		
ALPHA (2) =378 BETA (2) = .016	XO 31.100 31.800 PHI		
	.00029392811		
	320,00025112410		
ALPHA ( 2) =327 BETA ( 3) = 4.028	XO 31.100 31.800 PHI		
	.999 - 3296 - 3958		
	320,00029962770		
ALPHA (3) = 3,909 BETA (1) = .000	CO8.1E CO1.1E CX		
· · · · · · · · · · · · · · · · · · ·	.00028622849		
	320,90025092464		

DATE	ns:	44.	78

#### TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1165

ARCHI-DIATALE PROPERTY OFF STEAT OFF BOFLAF L

(REUF14) ( G4 FEB 75 )

#### REFERENCE DATA

## FARAMETRIC DATA

1.000

ELV-IB = RUDDER = GINBAL =

SREF = 2690.0000		- 076 000	M 14 VT		
LREF = 1290.3000	The whole	- 910,000	ED THE AT		
BREF = 1290.3000					
SCALE = .0200		- 402,55	2 14. 21		
130.33					
SECTION ( 1) BODY F	LAP LOWER	DE	FENDENT VA	RIABLE C	a
ALPHA ( 1) = -5.142	BETA ( 1) =	996	XO THI	31.100	31.899
				3384	- 3401
	•			3041	
				.0242	,,,,,,,
ALPHA ( 2) =321	9ETA (1) =	-4.993	XO.	31 .199	31.899
			FHI		
			.999	3101	3093
			320.000	3091	3196
	•				
ALPHA ( 2) =432	BETA (2) =	.016	ХЭ	31,199	31.899
			PHI		
				3199	
•			320.000	2676	2853
ALPHA ( 2) =3 <b>%</b>	BETA (3) =	4.925	XO THE	31.199	31.800
				3194	
• • • • • • • • • • • • • • • • • • • •			וננוו, נוצנ	2794	2958
ALPHA ( 3) = 3.864	BETA ( 1) =	.993	c×	31.190	31.899
			PHI		
			.000	3234	3321
			329.999	2718	- 2945

1.250

ARC11-0141A19 OTS+STRUT SRB-NOM MPS-OFF BDFLAP L (REUF15) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

# 80-VUB = 800.8

.DDD MACH =

ELV-18 =

RUDDER =

GIMBAL =

SREF LREF BREF SCALE	=	129	. ce	3000 3000	IN.		YM	٦F		=		.0000	IN.	ΥŤ		
SECTI	ION	( 1	) B	CCY F	LAP	LOWE	R					DEF	ENDE	NT VA	RIABLE CF	;
ALPHA	(	1) =	: -	4.113	5 B!	ETA	( .1	)	=		.003		X) PH		31.100	31.800
														.ooo	2356	2383
													320	. 000	2143	2197
ALPHĄ	(	2) =	:	39	3 8	ETA	( 1	):	=	-4	פספ,		X) FH		31.190	31.899
															2049	
										•			329	.000	2088	2224
ALPHA	(	2) =	=	36	В	ETA	( 2	) :	=		.012		XO PH		31.199	31,899
															2292	
													320	מממ.	-,1976	2043
ALPHA	(	2) =	:	294	B	ETA	{ 3	)	=	4	.928		CX H-1		31.100	31.800
														פכפ.	2127	-,1960
	٠												350	כפפ,	1957	2050
ALPHA	•	3) =	•	3.83	9	ETA	( 1	)	=		.012			1	31.100	31.800
														,000	2362	2416
													320	.000	2012	2065

DATE DS MAY 7!	DA	TE.	23	MAY	7
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#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1167

4.999

1,499

## ARC11-014TA19 OTS+STRUT SRB-NOM MES-OFF BOFLAR L

(REUF16) ( 04 FEB 75 )

<b>REF</b>	ER	EΝ	CE	DAT	A

#### PARAMETRIC DATA

.000

1,000

8.999 ELV-08 =

ELV-1B =

RUDDER = GINBAL =

REF	3	2699	.0000	SQ.FT.	XMR	=	=	976.	2222	IN. XT		
REF	=	129	2.3000	IN.	YMR	•	=		כככו	IN. YT		
REF	=	129	0.3000	IN.	ZMR	•	=	499.5	פמפכ	IN. ZT		
			.0200					•				
SECT	NCI	( 1	P YOCE	LAP LO	ER				DEFE	ENDENT V	RIABLE C	<b>F</b>
LEHA	( :	1) =	-4.09	BETA	( 1)	=	.o	12		-	31,199	31.899
			* *							FHI		
											~.1999	
										320.000	-,189ე	1790
LPHA	( 1	2) =	39\$	BETA	( 1)	=	-4.9	ממ		-	31 . 199	31,800
										PHI		
											1416	
			**							329.999	1685	1821
LPHA	( 1	<b>!)</b> =	291	BETA	( 2)	=	0:	03		ΧO	31.190	31.800
										PHI		
				. •							1799	
									:	320.000	~.1560	1672
LFHA	( 2	) =	316	BETA	( 3)	=	4 .02	25		ΧЭ	31.199	31.800
										PHI		
										.000	1524	1397
					•				1	329,999	1451	1566
LPHA	( 3	) =	3.851	BETA	(1)	=	-,00	16		СX	31.100	31.899
				•	•					PHI		
										.999	1558	1592
				•						320.000	1495	1519

ARC11-014TA19 OTS+STRUT SRB-HI MS-HI BDFLAF L (REUF17) ( 04 FEB 75 )

MACH =

#### REFERENCE DATA

#### FARAMETRIC DATA

פפפ,

1,000

ELV-IB =

RUDDER =

GIMBAL =

8.999 ELV-08 =

LREF BREF	= 1290.3000 N.	XMRP = 976.9990 YMRP = .9999 ZMRP = 498.9999	I IN. YT.
SECT	ton ( 1)800y PLAP LO	MÊR DEI	ENDENT VARIABLE CF
ALPHA	(1) = -4.159 BETA	(1) = .009	XO 31.100 31.800 PHI
			.00029992791
			320,00029883074
ALFHA	( 2) =426 BETA	(1) = -4.003	XO 31.100 31.800 FHI
			.00031593437
			320.00034893642
ALPHA	(2) =447 BETA	(2) = (2)	XO 31.100 31.800 PHI
			.00030062868
			320.00028943032
ALPHA	( 2) =435 BETA	(3) = 4.028	XO 31.100 31.800 PHI
			.99928912777
			320.00028422736
ALPHA	(3) = 3.930 BETA	(1) = .000	XO 31.100 31.800 PHI
			.00032463070
			320.00031423259

c	ACF	4.5	169

1.199

ARC11-0141A19 OTS+STRUT SRB-HI MFS-HI BOFLAF L

(REUF18) ( D4 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

1.000

8.999 ELV-08 =

ELV-IB = RUDDER = GINBAL =

SREF	=	269	90.000	ю 🛊	q.FT.	XMR	F	=	976	.0000	IN. XT		
LREF	=	129	90.300	ıs 🖠	N.	YME	F	Ξ		ככבכ.	IN. YT		
										מככב.	IN. ZT		
SCALE	=		.020	10									
SECT	ION	<b>(</b> . 1	i i BODY	FL	AP LOW	ER				DEF	ENCENT VA	RIABLE CI	
ALFHA	(	1)	= -4.5	198	BETA	( 1)	=		.999		CX	31.199	31.699
												2899	2823
					*						•	2690	
ALPHA	(	2)	=3	96	BETA	( 1)	=	-4	.003		XO PHI	31 . 199	31.899
												2734	2689
											329.000	2776	3023
ALFHA	(	<b>2</b> ) :	=4	38	BETA	( 2)	=		.009		XO PHI	31.199	31.899
			•								,000	2629	2612
											329.999	2459	2778
ALPHA	٠.(	2) :	=9	73	BETA	( 3)	=	4	.928		XO FHI	31.199	31.890
											כפפ.	2653	2523
											329,999	2466	2695
ALPHA	•	3) :	= 3.9	15	BETA	( 1)	5		.000		XO PHI	31.100	31.890
											.999	-,2777	2825
											329.999	2529	2915

ARC11-0141A19 OTS+STRUT SRB-HI MES-HI BOFLAF L

329.999 -.1714 -.1963

(REUF19) ( D4 FEB 75 )

#### REFERENCE DATA

 SREF
 =
 2690.0000 \$0.FT.
 XMRF
 =
 976.0000 IN. XT

 LREF
 =
 1290.3000 IN.
 YMRF
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN.
 ZMRF
 =
 400.0000 IN. ZT

 SCALE
 =
 .0200
 .0000 IN. ZT

ELV-IB = 8.000 ELV-08 = 4.000 RUDDER = .000 MACH = 1.250 GIMBAL = 1.000

PARAMETRIC DATA

#### SECTION ( 1) BODY FLAP LOWER DEFENDENT VARIABLE CP ALPHA (1) = -4.185 SETA (1) = -.999XO 31,100 31,800 PHI .000 -.1773 -.1694 320.000 -.1735 -.1943 ALPHA (2) = -,459 BETA (1) = -4.000 XO 31.190 31.899 PHI .000 -.1598 -.1516 320.000 -.1711 -.1859 XO 31.100 31.800 ALFHA ( 2) = -.438 BETA ( 2) = .012 PHI .999 -.1652 -.1667 329,999 -.1691 -.1857 ALPHA ( 2) = -.549 BETA ( 3) = 4.028 XD 31.100 31.800 PHI .000 -.1678 -.1582 320.000 -.1636 -.1787 XO 31.100 31.800 ALPHA (3) = 3.516 BETA (1) = .912FHI .999 -.1819 -.1924

#### DATE 03 MAY 75 TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1171

ARC11-D141A19 OTS+STRUT SRB-HI MFS-HI BOFLAF L

(REUF20) ( 04 FEB 75 )

#### REFERÈNCE DATA

#### PARAMETRIC DATA

1.000

8.000 ELV-08 =

ELV-IB =

RUDDER = GINBAL =

SREF = 2690.0000 tq.FT. LREF = 1290.3000 th. BREF = 1290.3000 th. SCALE = .0200	TY .NI CCCC. = TANY	
SECTION ( 1) BODY FLAF LOW	er defendent va	RIABLE CF
ALPHA ( 1) = -4.167 BETA	FHI	31,199 31,899
•		12371298
	320.000	12641441
ALPHA ( 2) =489 BETA	(1) = -4.993 XO. FHI	31.199 31.899
	.000	09610913
	320.000	11031199
ALPHA ( 2) =432 BETA	CX	31.199 31.899
		10491026
	320.000	19231296
ALPHA ( 2) = +.406 BETA	(3) = 4.925 XO FHI	31.100 31.800
		11209930
	320,000	19491283
ALPHA ( 3) = 3.657 BETA	CX ecc. = (1)	31.100 31.800
		09320881
	329.999	09051194

1.400

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF BDFLAF L

(REUF21) ( 04 FEB 75 )

8.000 ELV-08 =

#### REFERENCE DATA

PARAMETRIC DATA

SREE = 2690,0000 50.FT. XMRP = 976,0000 IN. XT LREF = 1290.3000 IN. YMRF = דץ או פפכפ. BREF = 1290,3000 IN. ZMRP = 400,0000 IN. ZT ELV-18 = .000 MACH = RUDDER = GIMBAL = 1.000

.9299 SCALE =

SECTION ( 1) BODY FLAR LOWER DEPENDENT VARIABLE CF

ALPHA ( 1) = -4.200 BETA ( 1) = .003 СX 31.199 31.899 PHI .000 -.2617 -.2620 320.000 -.2526 -.2498

31,100 31,800 ALPHA ( 2) = -.189 BETA ( 1) = -4.000CX PHI

.000 -.1818 -.1837 329.999 -.2197 -.2427

ALPHA (2) = -.291 BETA (2) = .012XΟ 31.100 31.600 PHI

.000 -.2269 -.2337 320.000 -.2103 -.2224

31.100 31.800 ALPHA ( 2) =  $\sim .306$  BETA ( 3) = 4.928ΚĐ FHI

.000 -.2000 -.1901 320.000 -.2156 -.2068

31.100 31.800 ΧO ALPHA ( 3) = 3,969 BETA ( 1) = .006 PHI

,000 -.2222 -.2332

320.000 -.1949 -.2137

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#### ARCII-DI4IAI9 OTS+STRUT SRB-NOM MPS-NOM BDFLAP L

(REUF22) ( 04 FE9 75 )

PARAMETRIC DATA

#### REFERÊNCE DATA

SREF = 2690.0000 \$0.FT. XMRP = 976.0000 IN. XT ELV-IB = 8.999 ELV-OB = .990 LREF = 1290.3000 th. YMRF = RUDDER = .999 MACH = 1.400 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT GIMBAL = 1,000 SCALE = .9299

#### SECTION ('1) BODY FLAP LOWER

#### DEPENDENT VARIABLE CF

ALPHA (1) = -4.167 BETA (1) = .006 31.199 31.899 ΧŌ PHI .000 -.1692 -.1781 320.000 -.1688 -.1883 ALPHA ( 2) = -.349 BETA ( 1) = -3.997 31.199 31.899 XΌ PHI .999 -.1228 -.1248 320.000 -.1424 -.1901 ALFHA (2) = -.366 BETA (2) = .012 CX 31,199 31,899 FHI .999 -.1496 -.1591 320.000 -.1422 -.1713 ALPHA ( 2) = -.522 BETA ( 3) = 4.031 ΧO 31,199 31,899 PHI .000 -.1449 -.1285 329.999 -.1347 -.1618 ALPHA ( 3) = 3.942 BETA ( 1) = .012 31.100 31.800 ΧO PHI .999 -.1382 -.1422 329.999 -.1326 -.1617

ARC11-D141A19 OTS+STRUT SRB-OFF NPS-OFF BDFLAF ( (REUF23) ( D4 FEB 75 )

PARAMETRIC DATA

## REFERÊNCE DATA

#### SREF = 2690,0000 \$Q.FT. XMRF = 976,0000 IN. XT .000 ELV-08 = E\_V-18 = LREF = 1290.3000 IN. YMRP = .0000 IN. YT RUDDER = . HACH = .900 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT 1.000 GIMBAL =

SCALE = .0200	:		
SECTION ( 1)800Y FLAP LOWER	DEFENDENT VARIABLE CP		
ALFHA (1) = -4.947 BETA (1) = .000	XO 31.199 31.899 PHI		
	.00032663109		
	329.99928372775		
ALPHA (2) = $276$ BETA (1) = $-4.003$	XO 31.100 31.800 FHI		
	.99933833454		
	320.00029992917		
ALFHA (2) =237 BETA (2) = .009	XO 31.199; 31.899 PHT		
	.00026892679		
	320.00022782287		
ALPHA (2) =195 BETA (3) = 4.028	XO 31.100 31.800		
	.00028172666		
	3201.09025422435.		
ALPHA (3) = 3.855 BETA (1) = .003	XQ: 31.100 31.800 FHT		
	.00928482807		
	329.09924582444		





DATE 03 MAY 75

## TABULATED SOURCE FRESSURE DATA - 1A19 ( ARC 11-014 )

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.000

1.199

## ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF BOFLAR L

(REUF24) ( 04 FEB 75 )

MACH =

## REFERENCE DATA

#### PARAMETRIC DATA

.ooo

1.999

ELV-18 = RUDDER = GIMBAL =

SREF = 2693.0000 to.FT. LREF = 1293.3000 to. BREF = 1293.3000 to. SCALE = .0200	TY - MI CCCC = TRMY	
SECTION ( 1)800Y FLAP LOW	ER DEFENDENT VA	RIABLE CF
ALFHA ( 1) = -3.993 BETA	CX <b>ecc.</b> = (1)	31.199 31.899
	.000	37643699 33203317
ALPHA ( 2) =279 BETA	( 1) = -4.993 XO	31.100 31.800
	.999	34913456 34403478
ALPHA ( 2) =246 BETA	•	31.100 31.800
		35733546 31183291
ALPHA (2) =273 BETA		31.100 31.600
	PHI	36543484
		33493449
ALPHA ( 3) = 3.894 BETA	PHI	31.100 31.800
		36293685 32253329

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 ) DATE 03 HAY 75

(REUF25) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290.3000 IN. YMRF = TY .NI CCCC. BREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT

SCALE = . .0200

SECTION ( 1) BODY FLAP LOWER

DEPENDENT VARIABLE CF

ALPHA (1) = -3.979 BETA (1) = .003 ΧĐ 31,100 31,800 FHI .000 -.2841 -.2727 320.000 -.2552 -.2607

ALPHA (2) = -.259 BETA (1) = -4.000CX 31,100 31,800 PHI

.000 -.2604 -.2614 320.000 -.2553 -.2640

AGC11-0141A19 OTS+STRUT SRB-OFF MS-OFF BOFLAP L

ALPHA (2) = -.28 BETA (2) = .012 СX 31.100 31.800 PHI

> .000 -.2817 -.2779 320,000 -,2351 -.2412

ALPHA (2) = -.189 BETA (3) = 4.031 31.199 31.890 ΧO· PHI

.000 -.2799 -.2560 320.000 -.2527 -.2521

31.100 31.800 ALPHA ( 3) = 4.005 BETA ( 1) = .003 XO PHI

.000 -.2962 -.3027

320.999 -.2454 -.2527

PARAMETRIC DATA

.000 ELV-19 = .000 ELV-08 = 1.250 .000 MACH = RUDDER =

1.000 GIMBAL =

	PAGE	• • • • •
•	PAUC	1111

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF BOFLAP L

(REUF26) ( 94 FEB 75 )

#### REFERENCE DATA

SEEF = 2690,0000 50.FT, XMRF = 976,0000 IN. XT

## PARAMETRIC DATA

.999

1.999

ELV-18 = RUDDER = GINBAL =

2.1-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		V.4.0.	_				•	
LREF	= 1290	ו פכפב.	N.	YME	=		דץ או פפכ			
				•			DOD IN. ZT			
			14.	CITA	-	402.2	333 MA Z1			
SCALE	= .	.9299				15				
SECT	ION ( 1)	BODY FL	AF LOW	ER			DEPENDENT VA	RIABLE CI	:	
A1 CHA	(1) =	-3 ana	DETA	1.45	-	nna	YO	31,199	31 800	
ACITA		-3.333	BEIN	1 23	•	. 333		31.133	38.033	
							PHI			
						•	.000	2669	2643	
							320,000	2527	2398	
AL ENA	/ 91 -	0.49	-		4	000	VA.	34 400	34 .000	
AUTHA	(2) =	243	DE!A	( 2)	= -4	· Chin		31 .100	31,033	-
			•			•	PHI			<u> </u>
							.000	1855	1858	<b>19</b> 5
							120,000	2192	2333	₩ 👼
							322.22			o ři
	4.00 -				_				74 000	ŎΖ
ALPHA	(2)=	237	BETA	(2)	=	.912		31.199	31.600	R A
							PHI			_ [-
							.000	2393	2251	. မ
							320,000	2172	2201	77 79
							363.235			$A \stackrel{iA}{\sim}$
							v.s			DF POOR QUALITY
ALFHA	(2)=	234	DETA	(3)	= 4	.031		31.199	51.899	
							PHI			<del>1</del>
							.000	2071	1980	, Q
							320,000	2208	2142	
							450,000	. 2230		
					_			24 400		
ALPHA	(3)=	4.947	BETA	(1)	2	.996		31.100	31.800	
							PHI			
•							999	2281	2312	
							320.999		2129	
							360.000	-12130		

## ARCIT-DIATATE OTS+STRUT SEB-NOW MES-NOW BOFLAR L

(REUFET) ( 04 FEB 75 )

## REFERENCE DATA

SREE	1	2690.0000	SQ.FT.	XHRP	=	976.0000	IN.	XT
LREF	ż	1290.3000	IN.	YMRP	=	.2022	IN.	YT
SREF	3	1290.3000	IN.	ZMRP	I	400,0000	IN.	ZT
SCALE	1	.0200						

SECTION ( 1) BODY FLAF LOWER							•	DEPENDENT VARIABLE CP			
ALPHA	.(-1)	2	-4.125	BETA	( 1)	*	.999	CX IH9	31,199	31.899	
								.000	3496	3283	
										3395	
ALPHA	(-5)	=	396	BETA	(1)	ı	-4.993	CX IH9	31.100	31,899	
								.999	3287	3616	
								320,999	3519	3727	
ALPHA	( 5)	=	408	BETA	( 5)	=	.009	CX IHE	31,100	31.899	
								.000	3263	2986	
								320.000	2894	3136	
ALFHA	( 2)	=	336	BETA	( 3)	=	4.025	XO FH <b>I</b>	31.100	31.890	
								.000	3419	3325	
								320,000	3978	3060	
ALPHA	( 3)	=	3.792	BETA	(1)	=	003	CX IHT	31 .100	31.899	
								.000	3022	2815	
								320,000	2749	2944	

## PARAMETRIC DATA

ELV-IB	=	.000	ELV-OB	3	מכם,
RUDDER		,ססס	MACH	=	.900
GTMBAL	=	1,000			

STATE STATES

DATE			78
DATE	nτ	MAY	13

REFERENCE DATA

## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-914 )

PAGE 1179

.000

(REUF28) ( 94 FEB 75 )

ARC11-014TA19 OTS+STRUT SRB-NOM NES-NOM BDFLAP L

## PARAMETRIC DATA

SREF = 2690.0000 SC LREF = 1290.3000 TO BREF = 1290.3000 TO SCALE = .0200 SECTION ( 1)800Y FL	N. ZHRF = 490	"TOTAL THE IT	BLE CF
	BETA (1) = .003	FHI	.100 31.800 .35083422
•			.32793471
ALFHA ( 2) =465	BETA ( 1) = -4.003	PHI	.100 31.890
•			31943126 32193395
ALFHA ( 2) =447	BETA (2) = .012	ХЭ 31 ТИЯ СССС,	190 31.890 32913228
ALPHA ( 2) =405	BETA (3) = 4.031	XO 3:	29873255 1.100 31.890 32853156
			30953312
ALFHA ( 3) = 3.819	BETA (1) = .009	PHI	1.100 31.890
			33123317 30683382

= BC-VJB ccc. ELV-IB = RUDDER = GINBAL = 1,199 1,000 ORIGINAL STREET

ARCTI-BIATATO OTS+STRUT SRB-NON MOS-NOM BDFLAR L

(REUF29) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

#### PARAMETRIC DATA

.000

CCC.

1.000

ELV-18 =

RUDDER =

GINBAL =

LREF BREF	=	129	בבבנ. כ	IN.	XMRF YMRF ZMRF	=	.0000	IN. YT		
SECT	ion	( 1	YOCE (	LAP LO	ÆR		DEF	ENDENT V	AR IABLE C	P
ALFHA	C	1) =	~4.989	BETA	(1) =	.996	i	XO PHI	31.199	31.800
		•							2237 2191	
NLFHA	( 2	2) =	375	BETA	(1) =	-3 .997		XO FHI	31.190	31.800
									2924 1987	
								JEU. 1930	1987	2119
CHA	( 2	:) =	498	BETA	( 2) =	.012		CX IHR	31.100	31.800
									2098	
								320.00	1924	2149
LPHA	( 2	) =	381	BETA	(3) =	4.931		CX IHT	31.199	31.890
									2229	
							3	520.000	1940	2197
LPHA	( 3	) =	3.843	BETA	(1) =	.023		XO FHI	31.199	31.899
					•				2295	
							3	320.999	1980	2189

			44.	~-
20.0	r e	73	MIV	7.

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1181

1.499

#### ARCI1-D14IA19 OTS+STRUT SRB-NOM MES-NOM BOFLAF L

(REUF30) ( 04 FEB 75 )

MACH =

PARAMETRIC DATA

.999

1,999

ů	REFERÊNCE DA	TA .		
SREF LREF BREF	= 1290.3000 N.	XMRF = 976,0000 IN. XT YMRF = .0000 IN. YT ZMRF = 400.0000 IN. ZT		ELV-IB RUDDER GIMBAL
SECT	TON (1)BODY FLAP LOW	ER DEPENDENT VA	RIABLE CF	
ALPHA	( 1) = -4.224 BETA	PHI .000	31.199 31.899 16391644	
ALPHA	( 2) =444 BETA	PHI		OF OF
ALFHA	(2) =405 BETA	320,999	13641471 31.100 31.800	ORIGINAL PAGE IS OF POOR QUALITY
		320.000	14261341 13921567	PAG QUAL
ALFHA	(2) =360 BETA	IHP COO.	31.190 31.890 14731257 13751486	ALIA SI El
ALPHA	( 3) = 3.819 BETA	PHI	31.100 31.800 13511274 12601519	

ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF BOFLAF L

(REUF31) ( 84 FEB 75 )

PARAMETRIC DATA

#### REFERENCE DATA

C

LREF =	1299.3000 IN.	YMRF =	976.9990 IN. XT TY .NI DECC.	ELV-IB = RUDDER = GIMBAL =	.000 .000 2.000	ELV-OB = MACH =	.000 .000
BREF = SCALE =	1290.3000 th.	ZMRP =	409,9090 IN. ZT	Variant -		·	

SECTION ( 1)800Y FLAF LOWER	DEFENDENT VARIABLE CF			
ALPHA ( 1) = -4.020 BETA ( 1) = .006	XO 31.193 31.899 FHI			
	2100 0100			
	320.00025372482			
ALPHA ( 2) =288 BETA ( 1) = -4.003	XO 31.100 31.890			
•	.ეეე32993354			
	329.99928542734			
	3231333			
ALPHA ( 2) =279 BETA ( 2) = .009	XO 31.100 31.800			
ALPHA (2) = 1.2/3 SEIN (2) 0	PHI			
	.00026622541			
	320,000 -,22702166			
ALPHA ( 2) =264 BETA ( 3) = 4.031	XO 31.190 31.890			
ACIMA ( E)	PHI			
	.00029772745			
	320,00027022545			
ALPHA ( 3) = 3,978 BETA ( 1) = .000	XD 31.199 31.899			
ALIMA ( 3) = 3.910 OCIA ( 1) = 1000	PHI			
	.00027852681			
	320,00023692312			
	Jan 1900 1901			

OF POOR OUR PLANTS

DITE	64	44.	78

## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-914 )

FAGE 1183

1.100

ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF BOFLAP L

(REUF32) ( 04 FEB 75 )

### REFERENCE DATA

FARAMETRIC DATA

SECTION ( 1) BODY FLAR LOWER DEPENDENT VARIABLE CF  ALPHA ( 1) = -3.900 BETA ( 1) = .000 XO 31.100 31.800  PHI .00035293482 320.00031453128  ALPHA ( 2) =255 BETA ( 1) = -4.000 XO 31.100 31.800  PHI .00032053143	ELV-OB =
ALPHA (1) = -3.98 BEEA (1) = .000 X3 31.100 31.800	
.00035293462 320.00031453128 ALPHA (2) =255 BETA (1) = -4.000 XO 31.100 31.600 PHI .00032053143	
320.00031453128  ALPHA (2) =255 BETA (1) = -4.000 XO 31.100 31.600  PHI	20
ALPHA ( 2) =255 BETA ( 1) = -4.999 XO 31.199 31.899 PHI .00032053143	RI(
PHI	Š j
.00032053143	A K
1202 10110	E E
320.00030933140	ď ď
ALPHA (2) =213 BETA (2) = .009 XO 31.100 31.800	ORIGINAL PAGE IS OF POOR QUALTURE
.00031243097	₹ <del> </del>
329 .99927482787	Q
ALFHA (2) =219 BETA (3) = 4.028 XO 31.100 31.800 FHI	
.00032613222	
320,0003083	
ALPHA (3) = 3.981 BETA (1) = .999 XO 31.190 31.899	•
.99932833282	
320,00028542927	

PATE	03	MIV	75

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-0141A19 OTS+STRUT SRB-OFF MS-OFF BOFLAR L

(REUF33) ( D4 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF = 269	a . ococ so . FT.	XMRF = 976.000	IN. XT		ELV-18 =	= 8c-v_3 ccc.	.999
LREF = 125	อา.3000 ใน.	-	IN. YT		RUDDER =	.000 MACH =	1.250
BREF = 129		· · ·	IN. ZT .	*	GIMBAL =	2.999	
SCALE =	.0200	•	•	•		•	
				•			
SECTION (	HOU PLAP YOUR	ER DEI	ENDENT VARIABLE CF	•			
ALPHA ( 1) :	-4.044 BETA	(1) = .003	XO 31.100 31.	899			
			PHI				
			2775 - 200	2628			
			320,0002487	2525			
ALPHA ( 2) :	=198 BETA	(1) = -4.000	XO 31.190 31.	800			
		• • •	PHI			•	
			.9992547	2529		<del>,</del>	
			320.0002494	258?		<b>ૄ</b> ૼૺૺ૾૾ૣ	
						<b>`</b>	
ALPHA ( 2) =	162 BETA	(2) = .009	XO 31.199 31.1	300		1,500 1,500	
			PHI			<b>***</b> *********************************	
	•		.9992895	2824		· <u>(2)</u> .	. 12
			329.9902364	2397			1
						7	
ALPHA ( 2) =	210 BETA	(3) = 4.031	XO 31.100 31.	990			ورثنا المتاع
			FHI			•	烈品
			.0002724:	2509	•	\	
			329.9992462	2468		V	<u>,</u>
ALPHA ( 3) -	: 3.846 BETA	(1) = .993	XO 31.100 31.1	หกก ห			
	- 5.540 OLIN	, ., - ,	PHI	<del></del>			
			.00028922	924			
•			329,9992375				

FAGE	1185

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF BOFLAF L

. (REUF34) ( 04 FEB 75 )

#### REFERENCE DATA

# SREF = 2690.0000 \$0.FT. XMRP = 976.0000 IN. XT

SCALE = .0200

### PARAMETRIC DATA

ELV-18 = 000 ELV-08 = 0000 RUDDER = 000 MACH = 1.4900 GINBAL = 2.000

#### SECTION ( 1) BODY FLAP LOWER

#### DEPENDENT VARIABLE CP

ALPHA ( 1) = -3.981	BETA (1) = .90	CX DI	31.100 31.800	
		.000	26622613	
		320.000	25922374	
		320.000		
ALPHA ( 2) =231	Ser. (4)4 00	e xo	31.100 31.800	ORIGINAL PAGE I OF POOR QUALTIS
ALIMA ( 2/ =231	OCIA ( 1)4.50	CA CA PHI	31.150 31.055	<u>स्त्र</u> स्त्र
		-	18611866	ದ್ದ
		.000		O H
		320.000	21752337	0.4
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the second			<del>22</del> <del>22</del>
ALPHA (2) =231	BETA (2) = .00		31.193 31.899	€ .
· .		FHI		ĕ i⊎
		.000	22862253	SP
		329.999	21682159	는 원
				الربوع المتعلق
ALPHA ( 2) =210	BETA . ( 3) = 4.02	8 XO	31.199 31.899	And the
		· PHI		1,0,
		.000	20691936	
		320,000	22622192	
ALPHA ( 3) = 3.930	BETA (1) = .00	3 XO	31.190 31.899	
		PHI	327	
•		.000	22562303	
		320,999	20922101	
	•	324.999	2032 2100	

ARCIT-914TAL MCH-BRE TURTE+STO PLATELET LOPA

(REUF35) ( D4 FEB 75 )

### REFERENCE DATA

#### PARAMETRIC DATA

\$REF = 2690.3000 LREF = 1290.3000 BREF = 1290.3000 SCALE = .0200	IN. YMRP =	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT		ELV-IB = RUCCER = GIMBAL =	00. = 60-V_3 000. 00. = HOAM 000. 000.5
SECTION ( 1) BODY F	LAP LOHER	DEFENDENT VA	RIABLE CP		
ALPHA ( 1) = -4.308	BETA ( 1) =	CX <b>e00.</b> IH9	31.190 31.890		
	•	.000 000.026	37933657 35823742		
ALPHA ( 2) =390	BETA ( 1) = -4	CX CCC.	31.196 31.899	•	
•		.000 320,000	36974192 37153859		
ALPHA ( 2) =384	BETA (2) =	CX S10.	31.199 31.899		
		.999 329.990	33693169 31613252		•
ALFHA ( 2) =345	BETA (3) = 4.	. <b>925</b> хэ	31.199 31.899		E C
	e .	.000 320.000	37563596 35863358		P [
ALPHA ( 3) = 3.903	BETA ( 1) = · .	.006 XO	31.199 31.899		

329.000 -.3143 -.3359

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#### TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

FAGE 1187

### ARCII-DIAIAIS OTS+STRUT SRB-NON NES-NON BOFLAF L

(REUF36) ( D4 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT YMRP = LREF = 1290.3000 IN. TY WI CCCC. ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. SCALE = .0200

FARAMETRIC DATA

.000 ELV-08 = .999 ELV-18 = RUDDER = .000 MACH = 1,199 GINBAL = 2,000

#### SECTION ( 1)BODY FLAP LOWER

#### DEPENDENT VARIABLE CF

31.199 31.899 ALPHA ( 1) = -4.998 BETA ( 1) = .993CX FHI .999 -.3757 -.3731 320,000 -.3442 -.3582 31.199 31.899 ALPHA (2) = -.342 BETA (1) = -4.000 CX PHI .999 -.3344 -.3294 329.999 -.3349 -.3515 ALPHA ( 2) = -.318 BETA ( 2) = .912 XO 31,100 31,800 FHI .000 -.3321 -.3300 320.000 -.3011 -.3281 XO . ALPHA ( 2) = -.417 BETA ( 3) = 4.031 31.100 31.800 PHI .000 -.3389 -.3229 320,000 -.3155 -.3323 ΧO 31.193 31.899 ALPHA (3) = 3.717 BETA (1) = .900FHI .000 -.3613 -.3620 329.999 -.3332 -.3625

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ARC11-014TA19 OTS+STRUT SEB-NOM MES-NOM BOFLAF L

(REUF37) ( 04 FEB 75 )

PARAMETRIC DATA

### REFERENCE DATA

			XMRP	=	976.0000 IN. XT		ELV-19 =	.000	ELV-08 =	.000
LREF	3	1299.3000 IN.	YMRF	=	TY .NI CCCC.		RUDDER =	.000	MACH =	1.250
BREF	=	1290.3000 IN.	ZMRP	ŧ	499,0000 IN. ZT		GIMBAL =	2.000		1,270
SCALE	=	.9299	_				VINDAL Z	E1333		

SCALE =	.9299			
SECTION ( 1	DEPENDENT V	AR TABLE CP		
AUFHA ( 1) =	-4.149 E	ETA (1) = .	CX and	31.199 31.899
			.000	25762432
		•		24152539
ALPHA ( 2) =	414 B	ETA (1) = -4.	CX ECC	31.100 31.800
			.900	21892161
			320.000	21852342
ALPHA ( 2) =	459 8	ETA (2) = .5	CX edi	31.199 31.899
•			.000	24842537
	•		329.000	22422425
ALFHA ( 2) =	468 B	ETA (3) = 4.0	CX 8S	31.199 31.890
			.000	23162109
	•		320,000	21152240
ALPHA ( 3) =	3.864 B	ETA >( 1) = .5	03 XÓ PHI	31.199 31.899
			.000	- 2626 - 2676
			320,000	23122459

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TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 )

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#### ARCIA-DIAIAID OTS+STRUT SRB-NOW NES-NOW BDFLAF-L

(REUF38) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

### FARAMETRIC DATA

.999

2.000

= 8C-VJ3 000.

ELV-IB =

	YMRP = .0000 IN. YI ZMRP = 400.0000 IN. ZI		QUODER = GIMBAL =
SECTION ( 1) BODY FLAF LOWER	R DEPENDENT	VARIABLE CF	
ALPHA ( 1) = -4.155 BETA	(1) = .993 XO PHI	31.199 31,899	
	.90	0020072033	•
	329.00	0019872015	
ALPHA ( 2) =367 BETA	(1) = -4.999 XO PHI	31,100 31,800	ORICHA
	.92	2013891379	េកិ
	329.00	2015541814	3 🗷
ALPHA ( 2) =518 BETA	CX <b>ecc. = (2)</b>	31,100 31,800	
•		1017341633	
•	320.00	0015741822	
ALPHA ( 2) =354 BETA (	(3) = 4.931 XO PHI	31.199 31.899	PAGE IN
	00.	0015951485	
	320.90	015761677	
ALPHA ( 3) = 3,939 BETA (	(1) = .999 ×O	31.100 31.800	
	מפ.	015201469	•
•	320,00	014411634	

ARC11-D14TA19 DTS SRB-OFF MFS-OFF BDFLAF L (REUF39) ( D4 FEB 75 )

#### REFERENCE DATA

#### SREF = 2690,0000 SQ.FT. XMRF = 976,0000 IN. XT YMRF = LREF = 1290.3000 IN. דץ און פפספ. ZHRP = 400.0000 IN. ZT BREF = 1290.3000 IN. SCALE = .9299 DEPENDENT VARIABLE CP SECTION ( 1) BODY FLAP LOWER CX 31,100 31,800 ALPHA (1) = -8.139 BETA (1) = .000 PHI .000 -.3267 -.3021 320,000 .0000 -.2627 ALPHA ( 2) = -4.032 BETA ( 1) = .90031,100 31,800 CX PHI .020 -.2794 -.2655 329,000 ,0000 -.2250 ALPHA (3) = -.228 BETA (1) = -4.903XO 31.199 31.899 .000 -.2854 -.2756 329,000 .0000 -.2760

ALPHA (4) = 4.932 BETA (1) = .993

ALPHA ( 3) = -.249 BETA ( 2) = .012

ALPHA (3) = -.261 BETA (3) = 4.028

ALPHA ( 5) = 7.929 BETA ( 1) = .993

.

329.999 .0999 -.2273 XO 31.100 31.800 PHI .999 -.2959 -.2718 329.000 .0000 -.2877 31,100 31,800 FHI .000 -.2774 -.2796 320.000 .0000 -.2216

.000 -.273? -.2653

31,199 31,899

XO. PHI

CX PHI

31,199 31,999 .000 -.2936 -.2790 320.000 .0000 -.2466 PARAMETRIC DATA

ELV-OB = ELV-18 = .000 בפפ, MACH = .900 RUDDER =

GIMBAL = 1,000

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### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1191

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SRB-OFF MIS-OFF BOFLAP L

(REUF40) ( 04 FEB 75 )

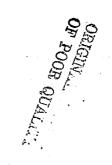
		DA.	

SREF	=	2690.0000	SQ.FT.	XMRP	=	976.0000	IN.	XT
LREF	=	1290.3000	IN.	YMRF	=	כפכפ.	IN.	YT
BREF	=	1290.3000	IN.	ZMRP	=	400,0000	IN.	ZT
SCALE	=	.9299						

### FARAMETRIC DATA

ELV-IB =	.000	ELV-OB	=	,000
RUDDER =	.000	MACH	:	1.100
GINBAL =	1,000			

	•			
SECTION ( 1) BODY FLAP LOWER	DEPENDENT VARIABLE CP			
ALFHA (1) = -7.992 BETA (1) = .003	XO 31.193 31.899 PHI			
	.00035163398			
	320,000 ,00003124			
	<b></b>			
ALPHA ( 2) = -4.080 BETA ( 1) = .003	XO 31.100 31.800			
	.00034683385			
	320,000 .00003025			
	350,000 ,0000000			
ALPHA ( 3) = $225$ BETA ( 1) = $-4.999$	XO 31.193 31.893			
	.99934693439			
	320,900 ,99993529			
•	3531330 13333 -14463			
ALPHA (3) =159 BETA (2) = .012	XO 31.100 31.800			
	.00034033405			
	320.000 .00003019			
· ·				
ALPHA (3) =312 BETA (3) = 4.028	XO 31.100 31.800 FHI			
* · · · ·	.00033343255			
	329,000 ,00003073			
ALPHA ( 4) = 3.885 BETA ( 1) = .000	XD 31.100 31.800			
	PHI .			
	.99936453794			
	329.000 .00003293			
ALPHA ( 5) = 8.073 BETA ( 1) = .000	XO 31.100 31.800			
	PHI			
	.00039793975			
	320,000 .00003717			



ARC11-D14TA19 OTS

SRB-DFF MS-OFF BDFLAF L

(REUF41) ( 04 FEB 75 )

### REFERENCE DATA

SREF	= .	2690.0000	SQ.FT.	XMRP	=	976.0000	IN. XT
LREF	Ξ.	1290.3000	IN.	YME	=	פפפפ.	IN. YT
BREF	=	1290.3000	IN.	ZMRF	=	400,0000	IN. ZT
SCA! E	=	.0200					

# PARAMETRIC DATA

ELV-1B	=	 פפס.	ELV-08	=	.000
RUCCER		.000	MACH		1.259
GIMBAL	=	1,000			

SECTION ( 1) BODY FLAP LOWER	DEPENDENT VARIABLE CF			
ALPHA (1) = -8.232 BETA (1) =006	XO 31.100 31.800 FHI			
	.99929492761 329.9992756			
ALFHA ( 2) = -4.098 BETA ( 1) =006	XO 31.100 31.800			
	.00027072549 320.000 .00002454			
ALPHA (3) =243 BETA (1) = -4.000	XO 31.199 31.899			
	.00028832913 320.000 .00002862			
ALFHA (3) =171 BETA (2) = .012	XO 31.100 31.800			
	.09927452748 329.099 ,09992376			
ALPHA (3) = -,871 BETA (3) = 4.025	XO 31.100 31.800			
	.00031273018 320.000 .0000 -:2585			
ALFHA ( 4) = 7.860 BETA ( 1) =003	CCB.15 CC1.15 CCX			
	.90031803271 320.000 .00002714			

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### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS

SRB-DEF NES-DEF BOFLAT L

(REUF42) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2693.0000 SQ.FT. XMRP = 976.0000 IN. XT 19EF = 1290.3000 IN. YMRP = TY ,NI CCCO. BREF = 1290.3000 IN. ZMRF = 499.0000 IN. ZT

SCALE =

.9299

SECTION ( 1) BODY FLAR LOWER DEPENDENT VARIABLE OF ALPHA ( 1) = -4.059 SETA ( 1) = .000 CX 31.100 31.800 PHI .999 -.2585 -.2568 329.999 .0000 -.2331 ALPHA ( 2) = -.183 BETA ( 1) = -3.997 X:O 31.199 31.899 PHI .000 -.2100 -.1923 329.999 .9999 -.2394 ALPHA (2) = -.195 BETA (2) = .012 CX 31.199 31.899 PHI .000 -.2252 -.2283 329,990 .9999 -.2987 ALPHA ( 2) = .027 BETA ( 3) = 4.028 31.100 31.800 ΧO FHI

329.999

ALPHA ( 3) = 3.924 BETA ( 1) = .003

ALPHA ( 4) = 7.809 BETA ( 1) = .003

.999 -.2128 -.2139 .9999 -.2151 CX 31.100 31.800 PHI .999 -.2186 -.2269 320.000 .9999 -.1967 ΧЭ 31.199 31.899 PHI בככ. -.2241 -.2411

320,000

.0999 -.1866

PARAMETRIC DATA

ELV-IB = = 80-V.B 000. .000 RUDDER = # HOAM CCC. 1.400 GINBAL = . 1,999

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ARC11-D14TA19 OTS

SRB-NOM MES-OFF BOFLAP L

(REUF43) ( 04 FEB 75 )

### REFERENCE DATA

SREF	2	2690,0000	Sq.FT.	XMRP	=	976,0000	IN.	XT
LREF	2	1290,3000	in.	YMRF	*	.0000	IN.	YT
BREF	3	1290,3000	in.	ZMRP	=	400.0000	īN.	ZŤ
SCALE	-	.0200						

### PARAMETRIC DATA

ELV-18		.000	ELV-OB	=	,000
RUDDER =	:	.000	MACH	=	.90
GTHBAL :	:	1,000			•

SCALE =	.9299	•
SECTION ( 1)	1800Y FLAP LOWER	DEPENDENT VARIABLE CP
ALPHA ( 1) =	F00. = (1) AT38 EE1.8-	XO 31.199 31.899 PHI
		.00037343600
		320.000 .00003228
ALPHA ( 2) =	-4.992 BETA (1) = .993	XO 31.199 31.899
	•	PHI
		.00028552696
		320.000 ,0000 -,2336
, ALPHA ( 3) =	342 BETA (1) = -4.099	
		PHI
		.00030543037
		320.000 .00002971
ALPHA ( 3) =	357 BETA (2) = .012	XO 31.100 31.800
		PHI
		.00029692827
•		320.000 .00002381
ALPHA ( 3) =	288 BETA (3) = 4.022	XO 31.100 31.800
		PHI
		.00030992944
		320,000 ,0000 -,3014
ALPHA ( 4) =	3.924 BETA (1) = .000	XO 31.100 31.800
		PHI
		.99928112639
	:	329.000 .00002316
ALPHA ( 5) =	7.962 BETA (1) = .000	XO 31.100 31.900
		₽H <b>1</b>
		* .99926532569
		<b>320.000</b> ,0000 ~.2302

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(REUF44) ( 94 FEB 75 )

PARAMETRIC DATA

.ccc.

1.000

.000 ELV-08 =

MACH =

ELV-18 = RUDDER = GIMBAL =

		AR	C11-914TA19 OTS	SRB-NOM ME	S-OFF BOFLAP L
	REFERENCE DAT	ra ·	•		
	SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	YMRF =	.gggg IN. YT		ţ ;
	SECTION ( 1) BODY FLAP LONE	R	DEFENDENT VARIABLE	E CP	
	ALPHA ( 1) = -8.126 BETA	ccc. = (t)	XO 31.19	31.699	
				263113 002870	
٠	ALPHA (.2) = -4.030 BETA	(1) = .999	PHI	31.899	
•			.320 .00032 .000 .000		<b>9</b>
	ALPHA ( 3) =363 BETA	(1) = -4.003	FHI .	31.899	RIGINAL PAGE LO POOR QUALITY
	· · · · · · · · · · · · · · · · · · ·	•	.929.938 00, 000.038		S QI
•	ALPHA ( 3) =363 BETA (	(2) = .012	XO 31.19 PHT .00032	31.899	AGE
			320,600 .00		A E
	ALPHA ( 3) =393 BETA (	3) = 4.022	PHI	31.800	•
			.000318 320.000 .000		•
	ALPHA ( 4) = 3.888 BETA (	1) = .000	XO 31.199 PHI		
				23615 D3266	
	ALPHA ( 5) = 7.977 BETA (	1) = .999	XO 31.199 PHI	31.890	

ARCII-DI4TA19 OTS

SRB-NON MES-OFF BOFLAR L

(REUF45) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290,3000 IN. זץ און פפפפ, ב קאאץ BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200

ELV-18 = .000 ELV-08 = RUDDER = .000 MACH = 1.259 1.000

PARAMETRIC DATA

SECTION ( 1) BODY FLAP LOWER	DEPENDENT VARIABLE CF
ALPHA (1) = -8.244 BETA (1) =009	XO 31.100 31.800
	.00024592286 320.0002186
ALPHA (2) = -3.936 BETA (1) =009	XO 31.100 31.800 PHI
	.00023292237
	320.000 .00002125
ALPHA ( 3) =309 BETA ( 1) = -4.000	XO 31.100 31.800 PHI
	.00023022146
	320.900 .00002402
ALPHA (3) =360 BETA (2) = .009	XO 31.193 31.893 PHI
	.00023432272
	320,990 .99992931
ALPHA ( 3) =405 BETA ( 3) = 4.025	CO8.1E CO1.1E CX
	.00024542310
	329,999 .0000 ~.2083
ALPHA ( 4) = 3.873 BETA ( 1) = .000	XD - 31.199 31.699 THT
	.00023762449
	329.900 ,00002037
ALPHA ( 5) = 7.989 BETA ( 1) = .000	XO 31.199 31.890 PHI
	.99925982679
	329.999 .99992232



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## TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-914 )

FAGE 1197

ARC11-014TA19 OTS SR

SRB-NOM NES-OFF BOFLAP L

(REUF46) ( 04 FEB 75 )

### REFERÊNCE DATA

#### SREF = 2690,0000 to.FT. XMRP = 976,0000 IN. XT LREF = 1290,3000 in. YMRP = ,0000 IN. YT BREF = 1290,3000 in. ZMRP = 400,0000 IN. ZT SCALE = ,0200

# FARAMETRIC DATA

ELV-18 = .990 ELV-08 = .999 RUDDER = .990 NACH = 1.490 GINBAL = 1.090

#### SECTION ( 1) BODY FLAP LOWER

#### DEPENDENT VARIABLE CF

SECTION ( 1)800Y FLAP LOWER	DELEMBENT ANTINDIE CL
ALPHA ( 1) = -8.175 BETA ( 1) = .0	03 XO 31,100 31,800 PH1
	.997129272971
	320.000 .000017.42
ALPHA (2) = -4.902 BETA (1) = -0	20 XO 31.199 31.899
	PHI
	.00018941899
	329.9991648
ALPHA ( 3) =348 BETA ( 1) = -4.5	202 XO 31.192 31.892
	.99915391487
	320.000 .00001783
ALPHA ( 3) =369 BETA ( 2) = .2	008.16 CO1.100 31.890
	.99916991742
	320,000 .00001543
ALPHA ( 3) =360 BETA ( 3) = 4.5	CC8 XO 31.100 31.800
	.000 - 1690 - 1603
<b>:</b>	320,999 ,99991534
ALPHA (4) = 3.900 BETA (1) = .5	PHĪ
	.99916241648
•	329.900 .99991442
ALPHA ( 5) = 7.653 BETA ( 1) = .5	. 008.15 001.15 CX acc
	.00017201761
	329.000 .00001377
	453.000

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ARC11-014TA19 OTS

SRB-OFF MPS-OFF BDFLAP L

(REUF47) ( 94 FEB 75 )

#### REFERENCE DATA

SREF	=	2699.0000 \$q.FT.	XMRP	=	976,0000 IN.	XT	ELV-IB =				3,
LREF	±	אל פפסב.פפנו.	AiAsla	=	.0000 IN.	Y.T	RUDDER =		HACH	=	1.4
BREF	=	1290.3000 IN.	ZHRF	=	400.0000 IN.	ZT	GIMBAL =	1.000			
SCALE	2	.9299									

#### SECTION ( 1) BODY FLAF LOWER DEPENDENT VARIABLE CF XO 31.100 31.800 ALFHA ( 1) = -4.950 BETA ( 1) = -.993PHI

.000 -.2629 -.2665 320.000 .0000 -.2435

CX 31,100 31,800 ALPHA (2) = -.150 BETA (1) = -4.000.000 -.2065 -.2006

320.000 .0000 -.2298

ΧO 31,100 31,800 ALPHA (2) = -.129 BETA (2) = .009PHI

.000 -.2270 -.2383 329.909 .0000 -.2177

ALPHA (2) = -.234 BETA (3) = 4.028 31.100 31.800 FHI

.099 -.2126 -.2156 320,000 .0000 -.2453

31.100 31.800 ALPHA (3) = 3.867 BETA (1) = .009ΧĐ PHI

.999 -.2299 -.2285 329.999 .0000 -.2029 CCO. .400

PARAMETRIC DATA

ħ	11	r	73	MAY	78

### TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1199

ARCIT-DIATATE OTS
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320.000

.0000 -.1526

SRB-NON MPS-OFF BDFLAP L

(REUF48) ( 04 FEB 75 )

•	EF	t e	B١	r	£	n	41	
ч		-		г.	_		•	1.70

 SREF
 =
 2690.0000 30.FT.
 XMRP
 =
 976.0000 IN. XT

 LREF
 =
 1290.3000 IN.
 YMRP
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN.
 ZMRR
 =
 400.0000 IN. ZT

 SCALE
 =
 .0200
 IN. ZT

FARAMETRIC DATA

ELV-18 = 8.900 ELV-08 = .000

RUPPER = .000 MACH = 1.400

1.000

SECTION ( 1)800Y FLAP LOWER DEPENDENT VARIABLE CP ALPHA (1) = -4.143 BETA (1) = -.003 XQ 31.199 31.899 FHT .000 -.1822 -.1930 320,000 .9999 -.1723 ALPHA ( 2) = -.243 BETA ( 1) = -4.003 X2 31,100 31,800 PHI .000 -.1453 -.1283 320.000 .0000 -.1779 ALPHA ( 2) = -.324 BETA ( 2) = .009 XЭ 31.199 31.899 PHI .999 -.1717 -.1896 329.900 -.1664 ALPHA ( 2) = -.435 BETA ( 3) = 4.025 31.199 31.899 PHI .000 -.1604 -.1557 329.000 .0000 -.1617 ALPHA ( 3) = 4.032 BETA ( 1) = -.006 XΟ 31.199 31.899 FHI .999 -.1694 -.1712

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. GIMBAL =

AMERICAN STREET	DATE DE MAY 75	TABULAYE	D SOURCE PRESSURE D	ATA - TA19 L ARC 11-	014 )	Ę	AGE 1200
			ARC11-D141A19 OT	s srb-off mes-	OFF BOFLAP L	(REUF49) ( 04	FEB 75 )
	REFEREN	CE DATA		÷		PARAMETRIC DATA	•
	SREF = 2690.0000 SQ LREF = 1290.3000 IN BREF = 1290.3000 IN SCALE = .0000	YMRF =			ELV-18 RUDDER GIMBAL	= HOAM 000. =	4.000 .900
11.15	SECTION ( 1) BODY FLA	P LOWER	DEFENDENT VA	RIABLE CF			
	ALPHA ( 1) = -4.041	BETA (1) =	CX 200. 1H7 ccc	31.193 31.899 29672724 .99992464			
5	ALFHA ( 2) =198	BETA ( 1) = -	XO ENI PHI .999 329.999	31.100 31.800 28042774 .00002788		<b>12</b> 24-	
	ALPHA ( 2) =162	BETA (2) =	CX 600. IH1 ccc. ccc. ccc	31.190 31.899 28312686 .99992339		# 1908	•

XO FHI

XO THT 31.100 31.800

31.100 31.890

.000 -.2807 -.2610 320.000 -.2638

.999 -.2763 -.2588 320.000 .9999 -.2399

ALPHA ( 2) = -.285 BETA ( 3) = 4.022

ALPHA ( 3) = 3.628 BETA ( 1) = -.993

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DATE	03	444	74

### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1201

ARC11-014TA19 OTS

SRB-OFF MIS-OFF BOFLAF (REUFSO) ( 04 FEB 75 )

#### REFERENCE DATA

### PARAMETRIC DATA

1.000

e.000 ELV-08 = RUDDER = .000 MACH = 1.100

ELV-18 =

GIMBAL =

coff	-	2600	1 0000	en Et	VI	_	075	0000	IN. XT		1 1
REE	-	100	2000	20 ·	XME!	=	310	טייי.	IN. XT	•	
									IN. YT		
					SMile	=	499	ככככ.	IN. ZT		
3CALE	=		.0200			-	*				
					-						
SECT	(ON	( 1)	P YUCE	LAP LO	ER.			DEF	NOENT VA	IR TABLE C	3
ALPHA	•	1) =	-4.017	BETA	(1)	= .	.003		xo :	31.199	31.899
			•						PHI		
									.999	3482	3453
		• .							320,000	.9999	3121
•							•				
ALPHA	(	2) =	162	BETA	(1)	= -4.	.000		CX	31.190	31,699
•		•	•						PHI		
				•					.999	3484	3455
•										,0000	
4											
ALPHA		2) =	141	BETA	(2)		912	2	XO.	31.100	31.800
						•			PHI		31.000
				e v				٠.		3253	- 3334
	٠			. • *							
							•		363.5.0	• 33.73	2346
AL PHA	t 3	2) =	234	BETA	(3) :	. 4	nos ·		YO.	31.199	34 900
	•				,	7.	JE J		FHI	31.133	31.020
						,				3444	- 3404
					100					בפתם,	
		1						• • •	363.333	. , , , , , ,	2123
ALPHA	C	3) =	3.674	BETA	( 1) :		999		XΩ	31 .100	31.800
				- 1 to 1		- •			PHI	44 1 1 1 1 1 1	44.033
										3594	7507
									ניניוי. נישכ	.0000	3231

ARC11-014TA19 OTS SRB-OFF NES-OFF BDFLAF L

(REUF51) ( 94 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF LREF BREF SCALI	=	1290	. 0000 . 0006 . 0006 . 0000		XMRP YMRP ZMRP	=	6.9999 IN. XT T. AN 0000. T. XI. 00000				ELV-IB = RUDDER = GIMBAL =	8,999 ,999 1,999	ELV-08 = MACH =	4,990 1,250
SEC	NCIT	( 1)8	DOY FI	LAP LOW	ÆR .		DEPENDENT V	ARIABLE C	٦		•			,
ALPH	<b>V</b> ( 1	1) = -	4.558	BETA	(1)	= .000	PHI	31.190						,
•			•			•	,000 000, 026		2648 2513					
ALPHA	( 2	?) =	138	BETA	( 1)	-4.003	XO IHT	31.100	31.899					
	•	•					. <b>999</b> 320.999		2794 2762					
, ALPHA	( 2	:) <del>=</del>	225	BETA	(2) =	ecc. =	XO PHI	31,199	31.890		OF OF	•	•	
		•					.090 329 .990		2766 2475	•				
ALPHA	( 5	) =	252	BETA	(3) =	4.022	CX IHFI	31.199	31.899		[GINAL POOR			
			•				.999 329,999		2757 2552		PAGE IS			
ALPHA	( 3)	) = 3	.864	BETA	(1) =	.999	XO FHÍ	31.100	31.800		五百五三五三五三三三三三三三三三三三三三三三三三三三三三三三三三三三三三三三		•	
		•				• .	.000	2832	2928		S			

.0000 -.2485

. DATE OS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1203

ARC11-014TA19 OTS

SRB-OFF NTS-OFF BOFLAP L

(REUF52) ( D4 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT YMRF = TY .NT CCCC. LREF = 1299.3000 IN. ZMRP = 400,0000 IN. ZT BREF = 1290.3000 IN. SCALE = .9299

### DEPENDENT VARIABLE CF

SECTION ( 1) BODY FLAP LOWER XO 31,100 31,600 CCC. = (1) AT38 CCC. = (1) = .000 PHI .000 -.2544 -.2599 329,999 .0000 -.2407 31.100 31.800 ALPHA ( 2) = -.195 BETA ( 1) = -4.903CX PHI -.2018 -.1987 כככ, 320,000 .0000 -.2298 31.100 31.800 ALPHA ( 2) = -.198 BETA ( 2) = .009 СX PHI -.2274 -.2494 .999 .0000 -.2184 320.000 ×Э 31.100 31.800 ALPHA ( 2) = -.186 BETA ( 3) = 4.922 PHI .000 -.2109 -.2092 320,000 .0000 -.2375 31.190 31.890 СX ALPHA ( 3) = 3.960 SETA ( 1) = .909 FHI -.2097 -.2269 .000 320,000 .0000 -.1991

FARAMETRIC DATA

4.000 8,000 ELV-OB = ELV-18 = ,000 MACH 1.499 RUDDER = 1,000 GIMBAL =

OF POOR OUALITY

ARCII-DIATAIN OTS

SRB-NOM MPS-OFF BOFLAR L

(REUF53) ( D4 FEB 75 )

### REFERENCE DATA

SREF	=	2690.0000	SQ.FT.	XMRP	=	976,0000	IN.	XT
LREF	•	1290.3000	IN.	YMRF	=	.0000	IN.	ΥŤ
BREF	3	1290.3000	IN.	ZMRF	3	499,9999	IN.	ZT
SCALE:	1	.0200						

### PARAMETRIC DATA

ELV-IB =	8.000	ELV-OB =	4.000
RUDDER =	םפפי,	MACH =	.920
GIMBA! =	1.000		

- :												
SECTI	ON (	1)800y F	LAP LOW	ER			DEPENDENT VARIABLE CP					
ALPHA	( 1)	= -4.179	BETA	`(1)	=	993	PHI .000	31,199 3243 .0000	3053			
ALPHA	( 2)	=339	BETA	( 1)	.=	-3 .997		31.100 2875 .0000	2803			
ALFHA	( 2)	=360	SETA	( 2)	3	.012	PHI	2782	2691			
ALPHA	( 2)	=411	BETA	( 3)	=	4 .022	PHI	31.190 2878 .9000	2757			
ALPHA	( 3)	= 3.936	BETA	(1)	=	996	PHI	31.100 2731 .9990	2564			

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24	TE	03	MAY	79

# TABULATED SOURCE PRESSURE DATA - TATO ( ARC 11-014 )

PAGE 1205

ARCI 1-DIATATE OTS

329,999

CX.

FHT

320.000

SRB-NOW MPS-OFF BDFLAP

(REUF54) ( 84 FEB 75 )

#### REPERENCE DATA

ALPHA ( 3) = 3.915 SETA ( 1) = -.003

AC CACACE DATA		•		RAMETRIC DATA	
SqEF   2690.0000 Sq.FT.   XMRP	TY .NI CCCC.		_	8.000 ELV-08 = .000 NACH = 1.000	4.900 1.100
SECTION ( 1)800Y FLAP LONER	DEPENDENT VARIABLE CP		•		
ALPHA ( 1) = -4.149 BETA ( 1) =	.000 YO				

.9999 -.2873

31.190 31.699

.0000 -.2989

.999 -.3275 -.3346

The second secon	DEFENDENT - VARIABLE CP				
ALPHA (1) 2 -4.149 BETA (1) 2 .000	XO 31.199 31.699				
	.00032303274 320.000 .00002908				
ALPHA (2) =315 BETA (1) = -4.003	XO 31.100 31.800 PHI				
	.99931653297 329,3209				
ALPHA (2) =327 BETA (2) = .006	XO 31.199 31.699				
	.99939573153 329.990 .99992767				
ALFHA (2) =288 BETA (3) = 4.016	XO 31.199 31.899 PHI				
	.99931993964				

FAGE 1256

ARC11-D14TA19 OTS

SRB-NOM MES-OFF BOFLAF L (REUFSS) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976,0000 IN. XT EREF = 1290.3000 IN. YMRF = .0000 IN. YT BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200

SECTION ( 1)BODY FLAF LOWER

DEFENDENT VARIABLE CP

31,199 31,899 ALFHA ( 1) = -3.981 BETA ( 1) = .000 FHI .000 -.2323 -.2282

320,000 ,0000 -.2166

CX 31,100 31,800 ALPHA ( 2) = -.369 BETA ( 1) = -4.000FHI

.000 -.2290 -.2309 329,999 .9999 -.2416

ALPHA (2) = -.309 BETA (2) = .012XO: 31,100 31,800

> .999 -.2293 -.2393 320,000 .0000 -.2099

ALPHA (2) = -.399 BETA (3) = 4.922XΌ 31,199 31,899 PHI

.000 -.2485 -.2290 320,000 .0000 -.2152

31.100 31.800 ALPHA ( 3) = 3.966 BETA ( 1) = .003 CX

PHI .000 -.2395 -.2506

320,999 .0000 -.2121

<

FARAMETRIC DATA

4,000 EI V-18 = 8.909 ELV-08 = 1.250 RUDDER = .000 MACH =

GINBAL = 1.000

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## TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

PAGE 1207

4.990

1.490

ARCET-DIATATE OTS

SRB-NON NES-OFF BOFLAF L

(REUFS6) ( 04 FEB 75 )

### REFERENCE DATA

### FARAMETRIC DATA

. .000

1.000

8.000 ELV-08 =

SREF	= 269	2.2222	SQ.FT.	XMRP	=	976.9990	IN. XT		
CACL	- 129	כככנ. כי	IN.	YMSF	=	.0000	IN. YT		
DACL	= 129	בפפנ. בי	IN.	ZMRP	=	400,0000	TN 7T		
SCALE	7	.0200				742.23JJ	1111 21		
SECT	ION ( 1	1800y F	LAF LO	MER		DEP	ENDENT V	ARTABLE (	<b>TP</b> ,
ALPHA	( 1) =	-4.971	BETA	(j) =	•		XO .	31.199	31.800
							.000	~.1836	199a
							329,999	.9999	1752
ALPHA	( 2) =	294	BETA	( 1) =	-4		XO THT	31.190	31,890
							פפפ.	1387	1285
							329.999	.9999	1765
ALPHA	(* 2) =	375	BETA	( 2) =	. •		XO PHI	31.199	31.899
		1.					.000	1744	1817
							320.000	.9999	1672
ALPHA	( 2) =	423	BETA	(3) =	4.	028	X)	31.199	31.800
							PHI		
							.סממ.	1648	1551
						3		.סססס	
ALPHA (	(3) =	3.634	BETA	( 1) =	-,		XO FHI	31 . 199	31.800
							.999	1585	1728
									- 1492

ORIGINAL PACE IS
OF POOR QUALITY

ELV-18 =

RUDDER = GIMBAL =

## ARC11-014TA19 OTS+STRUT SRB-NOW+MFS-NOW+BDFLAF L

(REUF57) ( D4 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290.3000 IN. זץ .NI פפפפ. = אאץ BREF = 1290.3000 IN. ZMRP = 400,0000 IN. ZT SCALE =

ELV-IB = = 8C-VJ3 CCC.8 RUDDER = .000 MACH = GIMBAL = 1.000

PARAMETRIC DATA

SECTION ( 1) BODY FLAP LOWER

DEPENDENT VARIABLE CF

XO

FHI

31.190 31.890

.999 -.2319 -.2479 329.909 -.2129 -.2357

ALPHA (-1) = -4.497 BETA (-1) = .003 CX 31,100 31,600 PHI .999 -.2294 -.2256 320.000 -.2219 -.2414 ALPHA ( 2) = -.339 BETA ( 1) = -3.997 31.100 31.800 ΧO PHI .000 -.1998 -.1981 320.000 -.2143 -.2356 ALFHA ( 2) = -.465 BETA ( 2) = .019 XO CX 31.100 31.800 PHI .000 -.2281 -.2328 329.999 -.2113 -.2382 ALPHA ( 2) = -.435 BETA ( 3) = 4.031 31.100 31.800 XO ... PHI .000 -.2071 -.1943 320.000 -.2025 -.2146 ALPHA ( 3) = 3.636 BETA ( 1) = .003

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DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1209

1.499

ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM BOFLAP L

(REUFSB) ( D4 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

8,000

.ססס

1,000

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	YMRF =	TX .NI 0000. TY .NI 0000. TX .NI 0000.		ELV-18 = RUDCER = GINBAL =
SECTION ( 1) BODY FLAF LOAD	ir I	DEFENDENT VARIABLE CF	•	
ALPHA ( 1) = -4.155 BETA	(1) = .999	XO 31.100 31.800 PH1 .00020512120		· · · · · · · · · · · · · · · · · · ·

ALPHA ( 2) = -.342 BETA ( 1) = 4.028 XO 31.100 31.800

.000 -.1652 -.1536 320.000 -.1661 -.1806

-.1992 -.2193

ORIGINAL PACE IS OF POOR QUALITY

### ARC11-0141A19 OTS+STRUT SRB-NOM MPS-OFF BDFLAR L (REUF59) ( D4 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRF = 976.0000 IN. XT LAEL = 1500.2000 IN. ANGLE = 10000 IN. AL BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE 3 .0222

4.000 E V-18 = 8.000 ELV-QB = RUDDER = .DDD MACH = 1 250 GIMBAL = 1.000

FARAMETRIC DATA

#### SECTION ( 1) BODY FLAP LOWER

DEPENDENT VARIABLE CF ALPHA ( 1) = -4.080 BETA ( 1) = .012 31.100 31.800 FHI .000 -.2375 -.2372 329.000 -.2141 -.2207 ALPHA ( 2) = -.375 BETA ( 1) = .012 31,199 31,899 CX PHI .000 -.2274 -.2317 320,000 -.1949 -.2032 ALPHA ( 2) = '--333 BETA ( 2) = 4.031 ΚΌ 31.100 31.800 PHI. .000 -.2168 -.2003 320,000 -.2001 -.2075

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DATE OS MAY 75

### TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-914 )

FAGE 1211

4.000 1.250

ARC11-014TA19 OTS+STRUT SRB-HT MFS-NOM BOFLAF L

(REUF60) ( 04 FEB 75 )

ELV-OB =

REFERENCE DATA

FARAMETRIC DATA

8.999

SREF	=	2699.9999	SQ.FT.	 XMRF	=	976,9999 IN	. XT
LREF	=	1290.3000	IN.	YMEP	Ξ	NI CCCC.	. YT
BREF	=	1290,3000	IN.	ZMRF	2	429.9229 IN	. ZT

ELV-18 = RUDDER = GIMBAL = .ggg MACH =

SCALE = .0200

SECTION ( 1) BODY FLAP LOWER

DEPENDENT VARIABLE CF

ALPHA ( 1) = -4.122 BETA ( 1) = .012

CX 31,100 31,800 FHI

-.1887 -.1819 329.999 -. 1847 -. 2943



ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF ORB BASE

(REUGO1) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				·	Middle de la calacte	- 0414	
SREF = LREF = BREF =	2690.0000 3Q.FT. 1290.3000 IN. 1290.3000 IN.	YMRF =	TY .NI CCCC. TY .NI CCCC. TY .NI CCCC.		ELV-18 = RUDDER = GIMBAL =	6,000 .000 1,000	ELV-08 =	4.000 .920
SCALE =	.0200	•						
SECTION	( 1) ORBITER BASE	•	DEPENDENT VAI	RIABLE OF				
ALFHA (	1) = -3.993 BETA	(1) = .000	BASE TAP NO	1.999				
			369.000	2179		•		
			379.999	2185				
			371.000	2098				
			372,000	2161			ž.	
			373.999	2076				
100			374,999	2294				

-.2296 -.2319

-.2276

-.2274

-.2336

-.2275

-.2355

ALPHA ( 2) = -,218 BETA ( 1) = -4,006

BASE 1.000 TAP NO 369.000 -.2631 370,000 -.2394 371.000 -.2273 372.900 -.2477 373.909 -.2311 374.999 -.2548 375.000 -.2488 376,000 -.2508 377.000 -.2433 378.000 -.2433 379.000 -.2582 380.000 -.2596 381,000 -.2578

375.000

376.000

377,999 378,999

379.000

380,000

381.000

ALPHA (2) = -.336 BETA (2) = .006

BASE 1,000 CH PAT 369.000 -.2083 370.000 -.2071 371.000 -.1990 372,000 -.2085 373.000 -.1992 374.999 -.2155 375.000 -.2063 376.000 -.2139 377.999 -.2999

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## ARC11-014TA19 DES-STRUT SEB-OFF MES-OFF ORB BASE

(REUGO1)

SECTION	( )	) ORBIT	ER	BASE
---------	-----	---------	----	------

### DEPENDENT VARIABLE CE

						•	.,	(1.12-4
AL PHA	(2) =	336	BETA	(2)	=	.006	BASE	1,000
1 ×	<b>.</b>						TAP NO	
							378.000	2142
		•			2		379.000	2224
							389.999	2241
		•					381,000	2225
ALPHA	( 2) =	\$55	BETA	( :3)	=	4.025	BASE	1.000
					•		TAP NO	
			1.				369.000	2444
		*					379.999	2183
							371,000	2196
							372.999	2339
							373.000	2297
							374.999	2323
		•	. •	•			375.000	2391
•						.*	376.999	2388
							377,999	2373
		•	1		٠.	•	378 .999	-,2393
			•				379.000	2371
							387.999	2449
							381.000	2466
		_	-			•		
A'_FHA	(3) =	3.948	BETA	(1)	=	,999	BASE	1.999
		• •					TAP NO	
	•	1.1					369.000	1997
							370,000	1979
		. •		•			371 .000	1827
							372.000	1961
		•				• .	373,000	1957
	-	•					374,993	2986
	• •		•		٠		375.999	2088
							376,999	2968
	• .		•				377,999	2023
•	· · ·						379,000	2058
	, •			•			379.000	2171
							380.020	2153
							381,000	2198
				•			3011333	15120

ORIGINAL PLOES

4.999

1.100

### ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF ORB BASE

(REUGO2) ( 04 FEB 75 )

MACH =

#### REFERENCE DATA

### FARAMETRIC DATA

8,000

.000

1.999

ELV-1B =

RUDDER = GIMBAL =

SREF = 2690.0000 50.FT.	XHRF = 976	.0000 IN. XT		
LREF = 1290.3000 IN.	YMRF =	TY ,NI CCCC.		
BREF = 1290.3000 IN.	ZMRP = 400	דב .או פפפפ.		
SCALE = .D2DD			•	
SECTION ( 1) ORBITTER BASE	•	DEPENDENT VA	riable of	
ALPHA ( 1) = -4.178 BETA	(1) = .999	BASE	1.000	
		TAP NO	• • • • • • • • • • • • • • • • • • • •	
and a grant of the second		369.000	3657	
		370.000	3479	
		371,000	3557	
		372,000	3609	
		373.000	3352	
		374,000	3616	
		375.000	3591	
		376,000	3569	
		377.000	3567	
		378.000	3535	
		379.000	3619	
		380,000	3594	
		391,000	3650	
ALPHA ( 2) =294 BETA	(1) = -4.005	BASE	1.999	• • •
		CN FIAT		
		369.000	4165	
	•	370.000	4119	
		371.000	4011	
		372.000	3940	
			3992	
		374 .000	4056	
		375.000	4075	
		376.000	4066	
		377,000	4066	
		378.999		
•		379,000		
		389.900	4125	
		381.000	- 4109	
ALPHA ( 2) =252 BETA	(2) = .009	BASE	1.000	
		TAP 'NO	4 5 0 0 0	
		369.000	3626	
		379,000	3444	
		371,000	3498	
		372.000	3562	
		373.000	3279	

374.000

375.000 376.000

377,000

-.3599 -.3553

-,3545

-.3559



# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1215

(REUGOE)

Ar.	RC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ORB BASE
SECTION ( 1) ORBITER BASE	DEPENDENT VARIABLE CF
ALPHA (2) =252 BETA (2) = .009	
POD =232 BETA (2) = .009	BASE 1.000
	TAP NO
	378,9993488
	379.0003632
	389,9993697
	381.0003610
ALPHA ( 2) =225 BETA ( 3) = 4.028	
2214 (3) = 4.028	BASE 1.000
	TAP NO
	369,000 -,4177
	379.9993974
	371.0004124
	372.0004090
	373.0003999
	374,000 -,4084
	375.0004026
	376.0004126
	377.0004123 378.0004138
	381,000 -,4188
LPHA ( 3) = 4.026 BETA ( 1) = .000	BASE 1.000
	TAP NO
	369.0003882
	370,0003703
	371 .0003747
	372.000 -,3793
	373.0003508
	374.920 -,3838
	375.0003806
	376,0003920
	377.0003786
	378,999 -,3769
	379.0003972
	380,000 - 3863
	381.7003864

377.000 -.3028

1.259

### ARC11-D14TA19 OTS+STRUT SRB-OFF MPS-OFF ORB BASE

(REUGOS) ( D4 FEB 75 )

8.000 B.V-08 = 4.000

#### REFERENCE DATA

### PARAMETRIC DATA

1.000

,000 MACH =

ELV-18 = RUDDER = GIMBAL =

REF = 2690.0000 to.FT. REF = 1290.3000 to. REF = 1290.3000 to. SCALE = .0200	YMRF =		77. NI 0000. 10. YT 10. NI 0000.	
SECTION ( 1) ORBITER BASE			DEFENDENT VA	I ABLE OF
META ( 1) = -4.188 BETA	(1) =	.993	BASE	1.000
	•		TAP NO	
			369.000	2717
			370.000	3043
	-		371.999	3973
			372,000	2935
			373,000	2752
• •		•	374,000	3027
			375.000	2987
			376.000	2994
			377.000	2973
			378.000	2959
			379,000	3075
			380.000	3050
			391.000	3110
LPHA ( 2) =291 BETA	( t) = -	3 .997	BASE	1.000
			CM FIAT	
	•	•	369.000	3381
			379.999	3472
			371 .990	3464
			372.000	3155
			373,999	3179
			374.999	3370
			375.000	3349
	•.		376.000	3384
			377,000	3392
			378,000	3344
			379.000	3473
and the second of the second			389,999	3441
			381.000	3473
LFHA ( 2) =177 BETA	(2) =	.016	BASE	1.999
			TAP NO	
		200	369.000	2916
			379.999	3979
			371.000	3108
		•	372,000	3019
	•		373 .000	2755
			374.999	3055
			375.000	3014
			376,000	3935

g

DATE DS MAY 75 TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-D14 )

(REUGOS)

FAGE 1217

ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ORB BASE

SECTION ( STORBITER BASE

DEPENDENT VARIABLE CF

ALPHA ( 2) = -.17 BETA ( 2) = .016 . BASE TAP NO 378.000 -.2973 379,990 -,3095 390.000 -.3081 381,999 -.3191 1,000 ALPHA (2) = -.366 BETA (3) = 4.031BASE TAP NO 369.000 -.3268 370.000 -.3494 371.000

371,000 -.3494 371,000 -.3499 372,000 -.3299 373,000 -.3119 374,000 -.3335 375,000 -.3365 376,000 -.3367 378,000 -.3367

378.999 -.3416 379.999 -.3479 389.999 -.3468 381.999 -.3496

1,999

-.3372

BASE

301.000

ALPHA ( 3) = 3.843 BETA ( 1) = .003

CH PAT 369,000 -.3175 379,999 -.3334 -.3363 371 .000 372.999 -.3232 373.000 -.3004 -.3394 374.990 375.000 -.3292 -.3296 376.999 377.999 -.3272 378.999 -.3231 379.999 -.3391 390.000 -.3355

377.999 -.2719

4,000

1.400

(REUGO4) ( D4 FEB 75 )

NACH =

### REFERENCE DATA

### PARAMETRIC DATA

.000

1.000

= 8C-V\_E CCC.8

ELV-18 =

RUDDER =

SQEF = 2690.0000 SQ.FT. XNQF = LQEF = 1290.3000 IN. YNQF = BQEF = 1290.3000 IN. ZNQF = SCALE = .0200	976.0000 IN. XT TY. NI CUCC. TY. NI CUCC.CCL
SECTION ( 1) ORBITER BASE	DEFENCENT VARIABLE OF
ALPHA ( 1) = -3.900 BETA ( 1) = .0	000.1 BASE 1.000
	369.0002836
	370.0002831
	371.9992827
	372.0002700
	373.0002571
	374.0992821
	375.0002821
	376.0002804
	377.0002794
	378.0002748
	379.0002866
	389,9992897
	381.0002866
	3011.33
ALPHA ( 2) =204 BETA ( 1) = -4.0	90 BASE 1.000
	TAP NO
	369.0002978
	370.0002981
	371.0002958
	372.0002610
	373.0002742
	374.9992833
	375,9092883
	376.000 -,2698
	377,9992994
	378.0002875
	379.0002952
	389,0002934
	381.0002954
LFHA ( 2) =396 BETA ( 2) = .0	16 BASE 1.000
	CA PAT
	369,9992639
	379.990 -,2799
	371.0002782
	372.9992569
	373.9992449
	374.0002728
	375.0002727
	376.9992739
•	U. U

PAGE 1219

DATE 03 MAY 75	TABULATED SOL	RCE PRESSURE DATA - 1419	( ARC 11-014 )	•
	AR	C11-014TA19 OFS+STRUT SRI	B-OFF MPS-OFF ORB BASE	(REUGD4)
SECTION ( 1) ORBITE	R BASE	DEPENDENT VARIABLE CP		
ALFHA ( 2) =308	BETA (2) = .016	CCC.1 32AB		
		378.9992639		
		379.0002775		
		389.9992734		
		381.0002758		
ALFHA ( 2) =267	BETA ( 3) = 4.031	BASE 1.000		
		TAP NO		
	•	369.0002853		• .
•		370.0002919		
		371.0002952		
All the second of the second		372 .0002730		
		373.0002592	•	
		374.9992836		
		375.9902852		
		376.0002864		
		377,9992839		•
		378 .9092813		
		379.0002944		
		389.9992882		
		381,0002904		
A. D				
ALPHA (3) = 4.392	DETA (1) = .012	BASE 1.000	•	•
		TAP NO		•
		369.0002751		**
	The second second second	379.9992848		
		371.9992793		
		372.9992641	•	
		373.0002517		
		374,9902767	•	
		375.0002804		
		376.9992781		
		377 .0002759		
		378.9992797		
		379.0002845		
		389.9902821		•
		381.0002836		

.990

(REUGOS) ( D4 FEB 75 )

PARAMETRIC DATA

#### REFERENCE DATA

### SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT ELV-IB = 6.000 ELV-OB = LREF = 1290.3000 IN. YMRP = .0000 IN. YT RUDDER = .000 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT GIMBAL = 1.000

SECT	ION (	1) ORBITÉR	BASE		, ,	DEPENDENT VA	RIABLE C
ALPHA	( 1)	= -4.114	BETA	(1)=	006	BASE	1.999
						TAF NO	4.
						369.999	4617
						370.000	4667
:						371.999	4782
						372.993	4346
						373.999	4997
			•	٠.		374.000	4222
٠.						375.000	5196
				•		376,000	3859
						377.999	4935
			•			378.990	4448
				•		379.000	3328
				•		380,000	3130
						381.000	3796
ALPHA	( 2)	=306	BETA	(1) =	-4 ,990	BASE CA PAT	1.000
						369.000	4858
			•			379.999	5973
						371.990	4923
						372.999	5291
						373,999	5289
						374.000	4711
						375.000	5366
						376.000	4139
			•			377.990	5122
		. •				378.000	4908
						379,000	3776
						389.000	-,3592
. •			1			381.000	4575
ALPHA.	( 5)	=254	BETA	(2) =	.016	- BASE	1.000
						CA SAT	
						369.000	4547
-						370.000	-, 4705
				-		371.000	4709
						372.000	4897
						373.999	5089
						374.999	4104
		•				375.999	5009
						376,000	3734
							4657

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(REUGOS)

	AR	C11-0141A19 O	TS+STRUT SR	B-NOM MFS-NOM ORB BASE
SECTION ( 1) ORBITER BASE		DEPENDENT V		
ALPHA ( 2) =264 BETA ( 2) =				
	.016	BASE	1.999	
		TAP NO		
			4375	
		379.000		
		380,000		
		381.999	~.3788	•
ALFHA ( 2) =348 BETA ( 3) =	4 028	0405		
	7.560	BASE TAP NO	1.000	•
		369.000	4220	
		370.000		the second of
		371.000	4628	•
		372.000	4593	
		373.000		
		374,000	5091 4343	
		375.000	4343 4911	
	* :	376.000	3832	
		377.000		•
		378.000	4466	
		379,000	- 3660	
		389,999		
		381,000	4099	
Sua. ( 9) a			. 4033	
FHA ( 3) = 3.924 BETA ( 1) =	.999	BASE	1,999	
		CH FAT		•
		369.000	4486	
		379.999	4657	
		371.000	4692	
			4714	
		373,000	4770	
		374.000	3957	
		375.000	4686	•
			3513	
			4228	
			4969	•
			3335	
		_	2998	
		391,000	3470	

ARC11-014TA19 OFS+STRUT SRB-NON MES-NON ORB BASE

(REUGOS) ( 94 FEB 75 )

8.000 BLV-08 = 4.000 .000 MACH = 1.100

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

ELV-18 = RUDDER = GIMBAL =

SREF = 2690.0000 \$0.FT. LREF = 1290.3000 ÎN. BREF = 1290.3000 ÎN. SCALE = .0200	XMRP YMRP ZMRP	=	.0000 IN. XT TY .NI CCCC.	
SECTION ( 1) ORBITER BASE			DEPENDENT VAI	ET ABLE C
ALPHA ( 1) = -4.074 BETA	( t) =	.000	BASE	1.999
			TAP NO	
			369.000	4822
			370.000	5025
	1.		371.000	5185
			372.000	5009
•			373.000	5202
			374.999	
			375,000	
			376.909	4337
			377.000	
and the state of the state of		,	378,000	4865
	. •		379.000	4137
			380,900	3969
			381.000	4338
ALFHA ( 2) =396 BETA	(1)=	-4.003	BASE	1.000
			TAP NO	
		•	369,000	5557
			379.999	5341
			371.000	5699
			372,000	5429
			373,999	5676
			374,999	5248
			375,999	5569
			376.999	4740
			377.900	5504
			378,000	5347
			379.000	4819
			380.000	4329
			381 ,000	4933
AUPHA ( 2) =498 BETA	(2) =	.009	BASE	1,000
	•**		TAP NO	
		•	369.000	4821
			370.000	5017
			371.000	5079
			372,000	4935
			373.999	5195
			374.999	4765
			375.000	5213
			376,920	- 4209
			377.000	5039
			211600	1 3333



#### FAGE 1223

#### ARC11-014TA19 OTS+STRUT SRB-NOW MPS-NOW ORB BASE

(REUGOS)

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

SECTION (	1) ORBITER	BASE				DEPENDENT VA	RTABLE C
ALPHA ( 2)	=498	BETA	( 2)	=	.009	BASE	1,000
			•		•	TAP NO	
					100	378.000	4802
	•					379.000	4099
						380.000	3911
						381,000	4395
ALPHA ( 2)	= -,334	BETA	( 3)	=	4.028	BASE	1.999
		• .				CM PAT	•
						369.000	5279
						370.000	5507
						371.000	5503
						372,999	5544
						373,999	5526
						374.999	5176
						375.000	-, 5578
						376,000	4542
						- 377,999	5533
•			•			378 .900	5366
						379.000	4725
						389.999	4276
						381.000	4987
ALPHA ( 3) :	3.984	BETA	( 1)	= '	.993	BASE	1.000
			100		•	CM PAT	
						369.000	5147
			100			370,999	5329
			•			371 .999	5378
•					*	372.999	5224
	•					373.999	5499
						374.990	5097
						375,000	5515
						376,999	4458
						377 .000	5259
						378.999	4998
		-				379,000	4438
						380.000	4979
						381.000	4481

DATE 03 MAY 75

4,000

1.250

ARC11-014TA19 OTS+STRUT SRB-NON NES-NON ORB BASE

(REUGO7): ( 94 FEB 75 )

MACH =

FARAMETRIC DATA

,000

1.000

8.000 ELV-08 =

ELV-IB =

RUDDER =

GIMBAL =

#### REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 976.0000 IN. XT LREF = 1290,3000 IN. TY ,NI CCCC. = PRMY BREF = 1290.3000 IN. ZMRP = 499,0000 IN. ZT

SCALE = .0200

SECTION ( 1) ORBITTER BASE DEPENDENT VARIABLE C ALPHA (1) = -4.131 BETA (1) = .003 BASE 1,000 TAF NO 369 .000 - 3420 379.999 -.3985 371.000 -.4061 372.000 -.4023 373.000 -.4118 374.000 -.3640 375.000 -.4147 376.999 -.3363 377.000 -.3977 378.000 -.3672 379.000 -.3042 380,000 ~.3037 381,000 -.3213 ALPHA ( 2) = -.300 BETA ( 1) = -4.000 BASE TAP NO. 369.000 -.3935 370.990 -.4059 371,000 -. 4271 372,000 -.4049 373,000 -.4257 374.000 -.3847 375.000 -.4161. 376.000 -.3473 377.000 -.4211 378.000. -.3917 379.000 -.3479 389.999 -.3219 381.000 -.3485

ALFHA ( 2) = -.411 BETA ( 2) = .012

BASE 1.000 TAP NO. 369.000 -.3518 370.000 -.3926 371.000 -.3969 372,999 -.3959 373.000 -.4014 374.999 -.3611 375.000 -.4032 376.999 -.3231 377.000 -.3969

#### ARC11-0141419 CTS+STRUT SRB-NOM NOS-NON ORB BASE SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CP ALPHA ( 2) = -.411 BETA ( 2) = BASE î.ooo TAP NO 378,000 -.3657 379.000 -,3111 380,000 -.2993 391.000 -.3212 ALPHA ( 2) = -.436 BETA ( 3) = 4.031 BASE TAP NO 359.000 -.3775 379,999 -.4243 371,000 -.4079 372.000 -.4278 373.999 -.4122 374.999 -.3816 375.000 -. 4259 376.000 -.3367 377.000 -. 4971 378.000 -.3815 379,000 -.3464 380,000 -.3967 391.000 -.3386 ALFHA ( 3) = 3.588 BETA ( 1) = BASE 1.000 TAF NO 369.000 -.3722 370,000 -.4947 371 .000 -.4975 372.999 -.4921 373.000 -.4193 374.900 -.3777 375.000 ~.4187 376,999 -,3295 377.000 -.4955 378,000 -.3818 379.000 -.3349 380.000 -.3091 381.000 -.3380

(REUGO7)

376,900 -.2368 377,900 -.2936 1.499

#### ARC11-014TA19 OTS+STRUT SRB-NOW MFS-NOW ORB BASE

(REUGOS) ( 94 FEB 75 )

#### REFERENCE DATA

## PARAMETRIC DATA ELV-18 = 8.000 FLV-08 = RUDDER = .000 MACH = GIMBAL = 1.000

LREF	=	2690.0000 1290.3000 1290.3000	IN.	XMRP YMRP ZMRP	=	•	0000 IN. 1000 IN. 1000 IN.	YT		
SCALE	*	.0203		_			•	-		
SECTI	ON.	(1)09817	ÉR BASE				DEPENDE	NT VAS	RIABLE OF	
ALPHA	( 1	) = -4.01	BETA	(1)=	:	.006	ВА	SF	1.999	
				• •				P NO	• • • • • • • • • • • • • • • • • • • •	
								,ספפ	2353	
							379	.000	2958	
				*			371	. פפפ	2995	
							372	.000	-,2934	
							373	.000	3011	
			•				374	. פכפ	2664	
							375	.999	3076	
							376	.ססס	2395	
				•			377	.000	~.2951	
		•	•				378	.000	-, 2729	
			• 1			•	379	.000	2330	• ,
						•	380	ממס.	2119	
							381	כככ.	2330	
			•							
ALFHA	( 2	) =486	S BETA	(1) =	-4	.000	BA:	SE	1.000	
							TAI	CN =		
								. פכפ	3008	
								.999	2936	
								כככ.	3191	
								. פפפ	2990	
							373	, פפפ	3199	
								. 202	2895	
								.999	3113	·
									2509	•
							_	,ססס	3124	
*								.999	2858	
								,900	2588	
		•						מפפ.	2395	
							381	מפמ.	2494	
								_		•
ALFHA	( Z)	=438	BETA	(2) =		.016	9A9		1.000	
•						•		CN		
								בכפ.	2661	
							370.		2925	
4 3								.000	2958	
		•					372.		2939	
								מפפ	3997	
							374.		2642	
		•					375.		2995	

(REUGOS)

AR	BEAR BASC MCM-STR MCM-BPS TURTS+STO CLAIALE-DIAPA									
SECTION ( 1) ORBITER BASE	DEPENDENT VARIABLE CF									
ALFHA (2) =438 BETA (2) = .016	BASE 1.000									
	378.9992662									
	379.9902359									
	380.000 - 2217									
	381.9992374									
ALPHA (2) =450 BETA (3) = 4.028	BASE 1.999 TAP NO									
	369.9002842	the second secon								

379.999 -.3160 371,999 -.2913 372.999 -.3182 373.000 -.2989 374.999 -.2830 375.000 -.3163 376.000 -.2461 377,000 -.2988 378.000 -.2659 379.000 -.2514 389,999 -.2271 381.000 -,2452

BASE

CH TAT

ALPHA ( 3) = 4.014 BETA ( 1) = .009

-.2013 -.3162 -.2980 -.2830 -.3163 -.2461 -.2988 -.2659 -.2514 -.2271 -.2452 1.000 -.2782 -.2951 -.2976 -.2959 -.2959 -.2957

369.000 370,999 371.000 372.000 373.999 374.000 -.2736 375,000 -.3025 -.2313 376,999 377.000 -.2899 378.999 -.2688 379.000 -.2425 380,000 -.2185 391,000 -.2451

4,000

.900

#### ARC11-014TA19 OTS+STRUT SRB-LOW MFS-NON ORB BASE: (REUGO9) ( D4 FEB 75 )

= 8C~V\_B 000.8

.000 MACH =

PARAMETRIC DATA

1.999

ELV-1B =

RUDDER =

GINBAL =

#### REFERENCE DATA

SREF = 2690.0000 SQ:FT. XMRP = 976.0000 IN. XT LREF = 1290.3000 IN. YMRF = .0000 IN. YT' BREF = 1290.3000 IN. ZMRP = 499.9999 IN. ZT

SCALE = בכבב.

377.000 -.4861

SECTION ( 1) ORBITTER BASE DEFENDENT VARIABLE CO ALPHA (1) = -4.191 BETA (1) = .000 BASE 1.000 TAP NO 369,000 -.4992 379.999 -.5966 371.000 -.5193 372.000 -.5098 373.000 -.5213 374.000 -.4462 375.000 -.5378 376.000 -.4159 377.000 -.5255 378.990 -.4697 379.000 -.3437 380,000 -.3371 381.000 -.3963 ALPHA ( 2) = -.438 BETA ( 1) = -4.000 BASE TAP NO 369.000 -.4993 370,000 -.5163 371.000 -.5060 372.999 -.5193 373.000 -.5517 374 .999 -.4759 375.000 -.5576 376.999 -.4315 377.990 -.5434 378,999 -.5915 379.000 -.3692 389.999 -.3675 381.000 -.4754 ALPHA ( 2) = -.525 BETA ( 2) = -.003 BASE 1.000 CA TAT 369.000 -.5006 379.990 -.4979 371.000 -.5050 . 372,999 -.5999 373.000 -.5323 374.000 -.4409 375.000 -.5200 376.990 -.3923

POOR QUALTUR

			•				PA.	C11-	914TA19 Or:	S+STRUT SR	B-LOW MFS-N	OM ORE	B BASE
SECTION (	1) 000	ITER	BASE					DE	PENDENT VA	RIABLE CF			
LFHA ( 2)	, a	525	BETA	(	2)	=	003		BASE	1,000	•		
	4.5								TAP NO				
									378,000	4542			•
								•	. 379.000	3376	• .	* .	-
								•	380.000	3219	*		
									381.000	3751			
ILPHA ( 2)	= : -,	44!	BETA	٠ (	3)	=	4.025		BASE	1.000	100		
					٠.				TAP NO				
								•	369.000	5162	0 (	<b>5</b>	
									379,999	5149	, jed 5	<u>.</u>	
1									371.000	5239	∙ ਦਾ ਹੈ	วิ	
	• .				٠				372.000		<u>Q</u> !	ヺ	
	*.								373.000	5361	: 유	Ā	
									374.000		OF POOR (	, →	
•			•						375.000	5432	POOR QUALITY	ਰ	
									376,909	4110		<b>&gt;</b>	
•	•	•							377,999 378,999	5175 4769		3	
				٠	٠.				379.000	4084		9	
*									389.999		<b>+4</b> #	<b>5</b>	*
• •									381.999	4984			
LPHA ( 3)	= 4.9	151	BETA	(	1)	=	.996		BASE	1.000		•.	
				•	•	_		•	TAP NO				
									369.000	4644	: :		
				٠					370,500	4749	1.0		
									371 .000	4788			
									372,999	4707			
	•				٠				373.000	4930			•
•					٠.				374,000	4313			
		•							375.000	5078			
•	٠.								376,999	3757			
									377 .000	4795		•	
									378.999	4347			,
									379,999	3234			
				•					389.993	3092			
•			1		٠,			•	381.999	3508			

REUGD9)

1,100

(REUG10) ( 94 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

SREF = 2690.0000 %Q.FT. LREF = 1290.3000 %N. SREF = 1290.3000 %N. SCALE = .0200	XMRP = YMRP = ZMRP =	976.0000 .0000 400.0000	IN. YT 😘			ELY-18 = RUCCER = GIMBAL =
SECTION ( 1) ORBITTE BASE		DEFE	NOENT VAR	TABLE OF		
					•	
ALPHA ( 1) = -3.970 BETA	(1) = -	,996	BASE TAP NO	1,000	•	
•			369 .000	4948		
	,		370,000	5174		
			371.000	5321		
			372,000	5164	•	
			373.000	5342		
			374,999	4865		
			375.000	5393		
			376,000	4478		
		•	377.000	5255		
			378.000	4967		OF OF
r e k			379,000	4292		
			380.000	4239		\times \
			381,000	4545		85
ALPHA ( 2) =387 BETA	(1) = -4	.003	BASE	1.000		ORIGINAL PAGE IC
ACMA ( 27130) BEIN	, .		TAP NO			ی ہے
			369.000	5793		2 %
		4.	370.000	5482		E D
•			371.990	5868		i i
			372.999	5593		<b>4 5</b>
			373.999	5827		. 4 . 2
			374.999	5444		
	_		375.999	5687	•	
	•		376.000	4914		
			377.000	5780		
			378.999	5505		
			379.000	5936		•
	•		389,999	4529		
			381.000	5149	•	
ALPHA ( 2) =429 BETA	(2) = .	909	BASE	1.999		
			TAP NO			
	•		369.999	4941		
			379.999	5121	•	
			371.999	5200		
			372.000	5051		
			373.999	5237		
			374,000	4920		
			375.000	5300		
			376,000	4496		
			377.000	5181		



DAT	31	23	·MAY	75
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#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1231

(REUGIO)

	ARC11-0	ITATATA OTS	S+STRUT SRB-	-LOW MPS-NOM ORB	BASE
SECTION ( 1) ORBITER BASE	DEP	ENDENT VAR	IABLE CP		·
ALPHA ( 2) =429 BETA ( 2)	ecc. =	BASE TAP NO	1.000		
		378.000	4926		
		379.000	4316		
		380.000	4169	· ·	*
	N	381,000	4525	•	
		301,000		• •	
ALPHA ( 2) =384 BETA ( 3)	= 4.928	BASE TAP NO	1,999		
•		369.000	5349		•
		370.000			22
		371.000	5553		
•		372 .000	5595		Z 23
		373.000	5587		82
	- 1	374.000	5195	*	R A
		375.000	5629		7
		376,000	4641		ORIGINAL PAGE IS OF POOR QUALITY
		377,000	5580		A
		378 .000	5431		
		379.000	4857	•	
		389,999	4494		전등
	•	381 .000	5026		
ALPHA ( 3) = 3.930 SETA ( 1) :	000	BASE	1.000		
		CN TAT			
	•	369.000	5239		
		370.000	5324		
		371 .999	5387		
		372.999	5249		
		373.999	5418		
	•	374.990	5198		
		375.999	5507		
		376.999			
	and the second	377 .999	5369		
		378.000	5160		
		379.000	4667	•	
	2* - 2 2	389.999	4324		
		381.000	4699	•	

ACC11-0141A19 OFS+STRUT SEB-LOW MPS-NOW ORB BASE

(REUG11) ( 04 FEB 75 )

#### REFERÈNCE DATA

#### PARAMETRIC DATA

8.000

000.

59EF = 2690.0000 \$0.FT.	XMRP = 976.0000	TN. YT	•	ELV-18 =
			·	RUDDER =
LREF = 1290.3000 N.		IN YT		GIMBAL =
BREF = 1290.3000 IN.	ZMRP = 400.0000	1 IN. 21		<b>01</b>
SCALE = .0200				
	•		All the second	
SECTION ( 1) CREITER BASE	DEF	ENDENT VARIABLE OF		
ALPHA ( 1) = -4.740 BETA	(1) = .006	BASE 1.000		
		TÀP NO		
	*	369.9993337		
		370.0004128		
		371,0004198		
		372.0004172		
		373.0004244	•	
•		374,0003810		
		375.9994217		
		•		_
		376,0003533		20
		377.0004122		್ತ್ರಾಕ್ಟರ
		378,0003843		F 10
		379.0003248		Ø∄
		380.0003310		Ω ⊱
		381.0003415		20 A
				ORIGINAL PAGE IS OF POOR QUALITY
ALPHA ( 2) =444 BETA	(1) = -4.990	BASE 1.000	*	<u> </u>
		TAP NO		A A
	•	369.0003954	•	巨型
		370.0004239		I E
	•	371.0004388		<b>₹</b> ₩
		372.0004269		· 02
		373,0004369		
	-			
	•	375.0004332		
		376.0003558	•	•
, di tari		377.0004324	•	
		378.0004094		
	•	379.0003713		•
		389.9993383		
		381,0003592	•	
ALPHA ( 2) =492 BETA	(2) = .012	BASE 1.999		
		TAF NO		
		369.0003547	To North Control	
		370,0004140		
	•	371.0004140		
		372,0004125		
		373.0004197		
	*		•	4
	. •	374.000 ~.3819		
		375.0004209		. •
	•	376.0003470		
		377.9990934		

ARCII-DIAIAIS OFS+STRUT SRB-LOW MES-NON ORB BASE

-.4232

-.4145

-.4203

-.3927

-.4266

-.3399 -.4117

-.3929

-.3529 399.990 -.3285 381.000 -.3542

371.000 372.000

373.000

374.000

375.000

376.000

377.000 378.000

379,000

(REUG11)

DEPENDENT VARIABLE CP . SECTION ( 1) ORBITER BASE BASE 1.000 ALPHA ( 2) = -.492 BETA ( 2) = .012 CM TAT 378.000 ~.3858 -. 3356 379.000 389.000 -.3227 ~ 3485 381,000 BASE 1.999 ALPHA (2) = -.324 BETA (3) = 4.034TAF NO 369.000 -.3764 370.000 -.4288 371.000 -.4135 372.000 -.4317 373.999 -.4215 -.3964 374.999 375.000 -.4392 -.3499 376.999 377.000 -.4156 378 .000 -.3930 . 379.000 -.3641 380.000 -.3262 -.3591 391.000 BASE 1,000 ALPHA ( 3) = 3.552 BETA ( 1) = TAP NO 369.000 -.3687 370,000 -.4181

ORIGINAL PAGE OF POOR QUALITY

#### ARC11=0141A19 OTS+STRUT SEB-LOW NES-NOM ORB BASE

(REUG12) ( 94 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

SREF = 2690.0000 30.FT. XMRP = 976.0000 IN. XT       ELV-18 = 8.000 ELV-1         LREF = 1290.3000 IN. YMRP = .0000 IN. YT       RUDDER = .000 MACH	
	= 1.499
BREF = 1290.3000 IN; ZMRP = 400.0000 IN. ZT GIMBAL = 1.000	

SCALE =	
SECTION ( 1) ORBITER BASE	DEPENDENT VARIABLE C
ALPHA ( 1) = -4.122 BETA ( 1) = .0	BASE 1.000 TAP NO
	369.0002783
	370.0003120
	371,9993155
	372,9903126
	373,0003196
	374.0002895
	375.000 ~.3189
	376.0002587
	377.9993118
	378.9902929
the second secon	379,9992695
	389.9992432
	381.0002642
ALPHA ( 2) =396 BETA ( 1) = -4.0	05 BASE 1.000
	CA FAT
	369.0003171
	379.9993125
	371,0003336
	372.9093295
	373,0003321
	374.9993944
	375.0003203
	376.0002737
	377.9903399
	378.0003087
	379.0002976
	389.0002635
	381.9992997
ALFHA (2) =378 BETA (2) = .0	06 BASE 1.000
	TAP NO
	369.0002831
	379.0003091
	371,0993111
	372.0003063
	373.0003129
at the account of the contract of the contract of	374.0002819
	. 375.0003127
	375.000 -,2552
	377.9993976



	•		AR	C11-014TA19 O	S+STRUT S	SRB-LOW MES-	NOM ORB BASE	<u>.</u>
SECTION ( 1) ORBIT	R BASE		•	DEPENDENT VA	RTABLE CF	•		•
ALFHA: ( 2) :=37	BETA	( 2) =	.006	BASE CN PAT	1.000			
	100			378.929	2500			
	. * .			379.920	2876 2611			
				380,000	2492			
				381.999	2641:		- 15v	
				361.333	2041			
ALPHA ( 2) =31	S BETA	( 3) =	4.925	BASE CA PAT	1.000			
				369.000	2997		1	
•				379.000	3291		. *	
				371,999				
				372.999	3288			
				373.999	3166			
				374,000	3012			
	100			375.990	3257	1.1		
				376.000	-,2622			
5.00				377,000	3085			
•				378 .000				
				379.000				
				369,999	2542			
				381.000	2777			
LFHA ( 3) = 4.009	BETA	(1) =	.999	BASE	1.999			
				TAP NO	• • • • • • • • • • • • • • • • • • • •		* •	
				369.000	2971			
				379,999	3197		100	
				371 .000	3143			
				372.999				
				373.999				
				374.990	2897			
				375.999				
				376,999	2497			
•			1.	377.000	3081			
		•		378,000	2923			
				379,000	2691			
			•	380,000	2427		41	
	1 2 2			381.000	2708			

CERTANAL PAGE

(REUG12)

4.000

.900

ARC11-014TA19 OTS+STRUT SRB-NOW MFS-OFF ORB BASE

(REUG13) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

8.000 E.V-08 =

.000 MACH =

ELV-IB = RUDDER = GIMBAL =

	10. XT CCC 10. XT CCC 11. XI CCC	
SECTION ( 1) ORBITER BASE	EFENDENT VA	TABLE OF
ALFHA ( 1) = -4.119 SETA ( 1) =003	BASE	1.000
	TAP NO	
369.000215 370.000216 371.000214 372.000223 373.000215 374.000236 375.000237 376.000236		2157
370.0002165 371.0002136 372.0002233 373.0002154 374.0002369 375.0002378		
		-
		2351
	379.000	2437
	380,000	2489
	381,000	2518
LPHA ( 2) =395 BETA ( 1) = -3.997	BASE TAP NO	1.000
	369.000	2616
	370.000	-,2342
	371 .000	2259
	372,000	2490
	373,999	2332
	374.999	2593
	375.000	2561
	376.999	2551
	377.999	2479
	378,000	2479
	379.999	2628
	389,999	2574
	381.999	2503
LPHA ( 2) =378 BETA ( 2) = .016	DACE	4.000
LPHA ( 2) =378 BETA ( 2) = .016		1,000
	TAF NO 369,000	0170
	379.000 170.000	2139
		2172
	371.000	2059
	372,000	2139
	373 .000	~.2125
	374.000	2258
	375.000	2212
	376.000	2217
	377,000	2134

DATE OS MAY 75

#### TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1237

ARC11-014TA19 OTS+STRUT 9	MCM-898	MPS-OFF	OR5	BASE
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(REUG13)

	ARCSS	-0141A19 OFS	+STRUT SR	B-NON MPS-OFF ORB I	BASE
SECTION ( S)ORBITER BASE	0	EPENDENT VA	TABLE CP		•
ALPHA ( 2) =378 SETA ( 2) =	.016	BASE TAP NO	1.000		
		378,000	2212		
		379,000	- 2350		
		380.000	2344		
		381,000	2311		
		30.,	-14311		
ALPHA ( 2) =327 BETA ( 3) =	4.928	BASE TAP NO	1.000	•	
	•	369.000	2376		
			2137		
		370.000	2141		
		371,000 372,000	2136		<u> </u>
		-	2207	*	₹4 <u>[</u> £
			2314		+ C
		375.000			$\mathbf{c}$
		376.000	2309		25
		377.000	2300		بيا لخ
		378.999	2263		ی آب
			2361	* *	
		380.000	2426		<u>එ</u> බ
		381.000	2466		<b>H</b>
		351,030	,2400		COOR QUALITY
ALPHA ( 3) = 3.909 BETA ( 1) =	.999	BASE	1.000	e e e e e e e e e e e e e e e e e e e	~ B
ALIMA ( 37 - 3.333 DEIN ( 17 -	.555	CA TAT	. = • • • • • • • • • • • • • • • • • •		
•		369.000	2124		
			2158	•	
		371 .999			
		372.999	2193		•
		373.999	1930		
		374.900	2184		
		375.999	2145	•	
		376,999	2151		
		377 .999		A STATE OF THE STA	
		378.999	2153		
		379.000	2260	•	
		389.999	2234		

381.999

-.2219

.

1.199

ARC11-014TA19 DTS+STRUT SRB-NOM MFS-OFF ORB BASE

(REUG14) ( 84 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

. מכפ

1.000

= 8C-V\_B CCC.8

FLV-IB =

RUDDER = GIMBAL =

					•
SREF = 2690.0000 10.FT.	XMRF = 976	.0000 IN. XT			
LREF = 1299.3000 IN.		-		• * • •	
BREF = 1290.3000 TN.		דץ או פפפפ.			
	ZHRP = 400	.0000 IN. ZT	-		
SCALE = .0200					
SECTION ( 1) ORBITER BASE		DEFENDENT VARI	ABLE OF		
11 Pick 4 41				•	
ALFHA ( 1) = -5.142 BETA	(1) =006		1.999		
		TAP NO	•		
			3454		
			3293		
	•	371,000	3355		
	•	372.999	~.3397		
	•	373,000	3243		
		374.000	3395		
•		375.909	3339		
		376.900	3353		
		377,000	-,3363		
			~.3361		
•			3388		
			3499		
			3457		
ALPHA ( 2) =321 BETA	(-1) = -4.993	BASE	1.000		
		TAP NO			
		· · · · · · · · · · · · · · · · · · ·	3849		
			3755		
•			- 3704		
· San			3679		
			3821		
			3763		
• Proceedings of the second second			- 3894		
			3784		
			-,3789		
•			3798		
			3871		
			. 3831		
		381.000 -	.3926		
ALPHA ( 2) =432 BETA	(2) = .016	BASE 1	.000		
=	, =, = ,,,,,	TAP NO	ويان ب		
			.3345		
			.3983		
			.3246		
			.3271		
			.3116		
			.3395		
			.3251		
		376.000 -	, 3263		

ALPHA ( 3) = 3.864 BETA ( 1) =

FAGE 1239

# ARC11-0141A19 OTS+STRUT SRB-NOM MFS-OFF ORB BASE (REUG14) SECTION ( 1)ORBITER BASE DEPENDENT VARIABLE CP ALFHA ( 2) = -.432 BETA ( 2) = .016 BASE 1.000 TAP NO 378.000 -.3251 379.000 -.3321 380.000 -.3288 381.000 -.3338 TALFHA ( 2) = -.396 BETA ( 3) = 4.025 BASE 1.000

BASE 1.000 TAP NO 369.990 -.3835 379,999 -.3676 .371.999 -.3713 372 .000 -.3789 373.999 -.3691 374.999 -.3786 375.999 -.3750 376.000 -.3793 377,999 -.3793 378.900 -.3993 379.000 -.3845 380,000 -.3843 381 .000 -.3852 BASE 1.000 TAP NO 369.000 -.3556

370.000 -.3362 371 .000 -.3493 372.000 -.3530 373.000 -.3310 374,000 -.3561 375.000 -.3499 376.000 -, 3540 377.999 ~.3524 378.999 -.3495 379,000 -.3583 389,999 -.3544 381,999 -.3581

4.000

#### ARC11-014TA19 OTS+STRUT SRB-NOM NES-OFF ORB BASE

(REUG15) ( 94 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

8,000

.000 1.000

ELV-18 =

RUDDER = GIMBAL =

REF = 2690.0000 SQ.F REF = 1290.3000 IN. REF = 1290.3000 IN. SCALE = .0200	T. XMRP = 976. 장MRP = ZMRP = 400	או פפפפ, או או איני	•
SECTION ( 1) ORBITER BA	SE	DEFENDENT VAR	TABLE CF
N_PHA ( 1) = -4.113 BE	TA (1) = .003	BASE	1.000
		CM TAT	2537
•		369 .000 000.075	2450
		371.000	2481
		372.999	2568
	•	373.000	2421
		374,999	-,2514
		375.000	2474
		376,000	
		377.999	· _ ·
		378.000	2469
		379.000	2540
de grand in the second		380,000	2525
•		391,990	2567
ALPHA ( 2) = +.390 B	ETA (1) = -4.090	BASE	1.000
72.71		CN PAT	
		369.000	2866
•		379,999	2796
		371.000	2739
		.372.000	-,2599
		373,000	2832
•		374.000	2692
		375.000	2755
		376.000	2750
en e		377.000	2749
		378.000	2804
		379.000	2834
		389.999	2897
	•	381,000	2853
ALPHA ( 2) =363 E	SETA (2) = .012	BASE	1.999
		CH PAT	
		369.000	2564
•		379.993	2342
		371.999	2599
		372.000	2522
•		373 .000	2313
•		374.000	2499
		375,000	2468
		376,990	2492

FAGE 1241

ARC11-014TA19 OTS+STRUT SRB-NOW NES-OFF ORB BASE

(REUG15)

SECTION ( 1)	ORBITER	BASE				DEPENDENT VA	RIABLE CP	
LFHA ( 2) =	363	BETA	( 5)	= .!	012	BASE TAP NO	1.000	
						378.222	2470	
					٠.	379.000	2527	
						383,000	2514	
						381.000	2559	
LFHA ( 2) =	294	BETA	( 3)	= 4.	928	BASE CM PAT	1.000	
						369.000	-,2787	•
• :		-		•		370.000	2675	_
			•			371,000	2673	55
						372.000	2694	OF POOR (
	٠.					373,000	- 2555	
						374,000		<b>79</b> 当
						375,000		. 6Z
			•			376,000	, - , , -	₩ £
						377,000		ຸ ຄ <b>້</b> .
						378,000		<u> </u>
						379.000		$A \stackrel{\sim}{\sim} A$
				•		389,999		- H
						361.000	2794	RIGINAL PAGE IS
LPH4 ( 3) =	3.634	BETA	(1)	· .0	112	BASE	1.999	
						TAP NO		
						369.000		
•	4					370,000		
						371.000		
						378,000	2742	
•						373.000	-,2599	
4.5				•		374,990	2698	
						375,999	2579	•
- , , , ,						375,999	2697	
						377 .000	2593	
	. •				•	378.990	2694	* *
						379,000	2753	•
				•		390.000	2779	
						704 000	-	

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ARC11-0141A19 OTS+STRUT SRB-NON MPS-OFF ORB BASE
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(REUG16) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = ,0200	XMRP = YMRP = ZMRP =	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT	•	ELV-18 = RUDDER = GIMBAL =	,9.000 000. 1.000	ELV-08 = MACH =	4.000 1.400
			•.			. •	,
SECTION ( 1) ORBITER BASE		DEPENDENT VARIABLE OF	•				

ALPHA ( 2) = -.291 BETA ( 2) = -.003

TAP 'NO 369.000 -.2176 370.000 -.2068 371.000 -.2064 372.000 -.1749 373,000 -.2128 374.000 -.1977 375.000 -.2053 376.000 -.2083 377.990 -.2039 378.000 -.2057 379.000 -.2961 380.000 -.2065 381,000 -.2150 BASE 1,000 TAP NO 369.000 -.2055

BASE

1.000

370.000 -.1934 371.000 -.1978 372,999 -.2018 373.999 -.1983 374.000 -.2035 375,000 -.1995 376.000 -,2006 377.000 -.2013

#### ARC11-0141A19 OTS+STRUT SRB-NOM MPS-OFF ORB BASE

(REUG16)

SECTION ( 1) ORBITER BASE	DEPENDENT VARIABLE CP
ALPHA (2) =291 BETA (2) =003	BASE 1,000
	378.0001959
	379,000 -,2045
	380.0002050
	381.0002047
	301.0332347
ALFHA (2) =318 BETA (3) = 4.025	BASE 1.999 CM PAT
	369.0002201
	370.0002074
	371,000 -,1924
	372.0002073
	373.9991748
	374.9992973
	375.0002025
	376,0002039
	377,0002003
	378.0001947
	379.0002097
	), 389.9992968
	381.0002040
ALFHA ( 3) = 3.861 BETA ( 1) =006	BASE 1.000
	CM FAT
	369.0002119
	379.9991955
	371.0002006
	372.9992129
	373.9901906
	374.9992996
	375.9902943
	376.9992975
	377.9992992
	378.9992926
	379.9002079
	380.0002089

OF POOR QUALITY

ARC11-D14TA19 OTS+STRUT SRB-HI MFS-HI ORB BASE (REUG17) ( D4 FEB 75 )

.000 MACH = .900

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

RUDDER = GIMBAL =

ELV-18 = 8.000 ELV-08 = 4.000

SREF	=	269	בפבים.	SQ.FT.	XMRP	=	976.0000	IN. XT		•
			מפפנ.		YMRP			IN. YT.		
			2.3000		ZMRP	=	400.0000			
SCALE			.0203		Ziriy.			• • • • • • • • • • • • • • • • • • • •		
3/426	-									
SECT	1ON	( 1	) ORBIT	th base			DEF	ENDENT VA	RIABLE OF	
ALPHA	(	1) =	-4.15	BETA	(1)	= .	009	BASE	1.000	
								TAP NO		
								369.000	5014	
								379.000		
								371.999		
								372.000		
								373.000	5152	
								374.000	4305	
								375.999	5283	
								376.999	3957	
								377.000	5128	
								378.000	4739	
•							•	379.000	3241	
								380,000	3299	
								381.000	3925	
AL PHA		2) =	420	5 BETA	(1):	<del>-4.</del>	993	BASE	1.000	
								CA PAT		
								369.000	5021	
							• .	370,000	5140	
								371.000	- 5157	
								372,999	5217	
								373,999	5569	
								374 .000	4773	
•								375.000	5673	
								376.000		
								377.000		
								379.000		
								379,000		
						•		389.999	3882	
			•					381,000	4937	
								3011333	1433.	
ALPHA	. (	2) =	44	7 BETA	(.2)	= .	999	BASE	1.000	
-			•					TAF NO		
					•			369.000	4975	
								379.999	5195	
								371.000	5113	
				•				372.000	5032	
								373.000	5398	
								374.000		
								375.000	5457	
								376,999	4026	
					•		•	377,000	5089	
								Section?	2059	

FAGE 1245

#### ADC11-0141A19 OKS+STRUT SRB-HI MES-HI ORB BASE

(REUG17)

				AR	C11-014TA19 OFS	+STRUT SRB-H	II M-2-HI OKO DAS	-
SECTION ( 1)	RBT TER	BASE		•	DEFENDENT VAR	TABLE CF		,
ALPHA ( 2) =	- 447	BETA	(2) =	.009	BASE	1,000		
ACITAN CEF	=		•		CN TAT			e de la companya de
				·	378.000	4853		, * · · ·
				•	379.000	3459		
•	•				380,999	3362		
					381,000	3929		
ALPHA ( 2) =	43)	BETA	(3) =	4.928	BASE	1.000		0
42 HA ( 67 4			, 4.		CH TAT			- 31 F
					369.000	5179		2 6
					379,999	5189		25
					371.000	5317		F POOR QUALITY
					372.999	5273	•	F
					373.000	5595	1.	
* - * - * - * - * - * - * - * - * - * -					374.000	4916		72
					375.000	-, 5615		FS
					376.999	4343		
					377,999	5577	•	₽ E
	•				378 .999	5936		· W
•					379.000	-,4090		
		•			389.999	3483		
	•			•• .	381.990	4484		
ALPHA ( 3) =	3.930	BETA	(.1)	= .000	BASE	1.000		
		•		• .	CH PAT			
					369.000	4434		
*					370,000	4633		:
					371 .000	4790		
					372.999	4641	•	
					373.999	4934		
•				•	374.993	4289		
					375.000	5119		
•					376.999	3852		
			•		377 .999	4883		
				100	378.999	4619		
-					379.000	3534		
		٠			389.999	3388		

4,000

1,199

ARC11-014IA19 OTS+STRUT SRB-HI MES-HI ORB BASE

(REUG18) ( 54 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

מפט 1.000

8,000 E\_V-0B =

ELV-IB =

RUDDER = GIMBAL =

				as ET	V. D.	_	07F	nana	IN. XT		
				SQ.FT.							
REF			פפפב.כ		. AMSE	=			IN. YT		
		129	מפפד, כ	IN.	ZMRF	= -	499	. ככככם	IN. ZT		
SCALE	±		.0200						•		
				En BACE				nest	NOENT VAR	TARIE OF	
SECT	ION	( 1	) ÚKSI II	ER BASE				OE! C	ASCIAL AND	(17326 4	
ALPHA	(	1) =	-4.09	B BETA	(1) =	:	.999		BASE	1.000	
									TAP NO		
									369 .000	4392	
. •									370,000	4425	
									371.999	4579	
									372,000	-,4397	
		-				•			373,000	4525	
			•						374,000	4083	
					•				375,000	~.4608	
									376.000	3705	
•			•						377,000	4492	
				1 .					378.000	-,4240	
									379.000	-,3429	
									360,000	3279	
									381.000	- 3683	
									301.333	-,5055	
AI SHA		2) =	- 39	8 BETA	(1):	: -4	.003		BASE	1.000	•
42. Q	٠,	•••			,				TAP NO		
									369.000	5010	
									370.000		
				•					371.000	5111	
									372.999	-	
									373,999		
									374 .909		
									375.000		
					. •				376,000		
									-	5035	
-	Ţ,			•					377.993	and the second second	
				•					378.000		
									379,000	4178	
									389.999	-,3729	
		٠	•						381.000	4263	
ALPH/	1	2) =	43	BETA	(2)	=	.009		BASE	1.000	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•								TAP NO		
			•		• 1				369.000	4283	
									370.000	4423	
					.* .				371.000	4466	
									372,000	4327	
									373.000	4428	
									374.000	4137	
			2.1						375,000	4592	
									376,999	3606	
									377.000	4402	
									הנהיי וזכ	-,4476	

(REUG18)

## ACTI-DIATATO DIS+STRUT SRB-HI MFS-HI ORB BASE SECTION ( 150RBITER BASE DEFENDENT VARIABLE CF ALFHA ( 2) = .009 BASE 1.000 TAF NO 378.000 -.4122 379.000 -.3441

389,999 -.3219 381,999 -.3642 ALFHA (2) = -.573 BETA (3) = 4.028 BASE 1.000

ALPHA (2) = -.573 BETA (3) = 4.028 BASE 1,000
TAF NO.
369.000 -.4705
370.000 -.4905
371.000 -.4905
372.000 -.4903

372.000 -.4903 373.000 -.4756 374.000 -.4445 375.000 -.4932

376.000 -.3764 377.000 -.4801 378.000 -.4590 379.000 -.3978 380.000 -.3284

381.000 -.4101

ALPHA ( 3) = 3.915 BETA ( 1) = .000

BASE TAP NO 369.000 -.4532 370,000 -.4657 371 .000 -.4743 372.000 -.4505 373.000 -.4638 374.990 -.4389 375.000 -.4796 376.999 -.3764 377.000 -.4618 378,999 -.4399 379.000 -.3754 380.999 -.3428

-.3826

381.000

ANCII-DIATAIN OTS+STRUT STB-HI MFS-HI ORB BASE

(REUG19) ( D4 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT LREF = 1290.3000 IN. YMRP = .0000 IN. YT BREF = 1290.3000 IN. ZHRF = 400.0000 IN. ZT SCALE =

ELV-IB = 8.000 E.V-08 = 4.000 . HOAM CCC. 1.250 RUDDER = GTMBAL = 1.000

PARAMETRIC DATA

SECTION ( 1) ORBITER BASE DEFENDENT VARIABLE OF ALPHA ( 1) = -4.18\$ BETA ( 1) = -.999 BASE TAF NO 369.000 -.3006 370.000 -.3335 371.000 -.3481 372.000 -.3359 373,000 -.3450 374.000 -.2920 375.000 -.3497 376.000 -.2686 377.000 -.3307 378,990 -.2992 379,000 -.2326 380,000 -.2263 381.000 -.2534 ALPHA (2) = -.459 BETA (1) = -4.000BASE 1.000 CM PAT 369.000 -.3522 370.000 -.3387 371.000 -.3713 372.000 -.3384 373.000 -.3724 374 .000 -.3254 375.999 -.3562 376.000 -.2895 377.000 -.3626 378.000 -.3325 379,000 -.2841 389.999 -.2571 381.000 -.2827 BASE ALPHA ( 2) = -.438 BETA ( 2) = .012 TAF NO 369.000 -.3109 370.000 -.3319 -.3381 371.000 372.000 -.3325 373.999 -.3391 374.000 -.2983 375.999 -.3431 376.990 -.2611 377,000 -.3344

- FAGE 1249

#### ARC11-014TA19 OTS+STRUT SRB-HT MFS-HT ORB BASE

(REUG19)

SECTION ( 1) ORBITES BASE	DEPENDENT VARIABLE CP
LPHA ( 2) =430 BETA ( 2) = .91	
	TAF NO
	378.9992986
	379.0002441
	380.0002272
	381.0002590
LPHA ( 2) =549" BETA ( 3) = 4.020	BASE 1.000
	CM FAT
	369.9993359
	379.9993699
	371,9993387
	372.0003680
	373.0003395
	374.9993257
	375.0003669
	376.0002703
	377.0003372
	378.0003156
	379.0002873
	389.9992957
	391.9992594
LPHA ( 3) = 3.516 BETA ( 1) = ,912	BASE 1.000
	TAP NO
	369.0003326
	370.0003494
	371 .9993521
	372.9993411
	373.9993496
	374.0003244
	375.9993648
	376,9992674
	377.9093488
	378.9993174
	379.0002708
	389.9992394
	361.0002741

ARC11-0141A19 OFS+STRUT SRB-HI MPS-HI ORB BASE

(REUG20) ( 94 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

											•
!	REF	=	1299.3000 TN. 1299.3000 TN.	XMRP YMRP ZMRP	=	TX .NI 0000. TY .NI 0000. TX .NI 0000.		ELV-18 = RUDDER = GIMBAL =	8.000 000. 1.000	E_V-08 =	4.000 1.400
	SECT	NC1	( 1) ORBITER BASE		•	DEFENDENT VA	RIABLE C				
,	ALPHA	(	1) = -4.167 BETA	(1)=	.993	BASE TAP NO	1.000				

369.000 -.2584
370.000 -.2685
371.000 -.2682
373.000 -.2682
373.000 -.2823
374.000 -.2883
376.000 -.2885
376.000 -.2853
376.000 -.2052
377.000 -.2777
378.000 -.2456
379.000 -.1852
380.000 -.1852
380.000 -.1694
381.000 -.1986

ALFHA ( 2) = -.489 BETA ( 1) = -4.993

BASE 1,000 TAF NO 369.000 -.2844 370.999 -.2495 371.990 -.2875 372.000 -.2549 373.000 -.2932 374 .000 -.2347 375.000 -.2644 376.999 -.2116 377.000 -.2838 378.999 -.2439 379.000 -.2131 389.990 -.1783 381.000 -.1975

ALPHA ( 2) = -.432 BETA ( 2) = .009

BASE 1.000
TAP NO
369.000 -.2513
370.000 -.2518
371.000 -.2655
372.000 -.2586
373.000 -.2723
374.000 -.2222
375.000 -.2669
375.000 -.1910
377.000 -.2584

(REUG2D)

	ARC11	1-014TA19 Ors	S+STRUT ST	8-HI NFS-I	IT ORB BASE
SECTION ( 1) ORBITEN BASE		DEPENDENT VA	TABLE CF		
ALFHA ( 2) =432 BETA ( 2) :	e00. =	BASE TAF NO	1,999		
		378,999	2275		
		379.000			
•		369.999	1654	•	
		381.000	1865		A Property of the Control
ALPHA ( 2) =486 BETA ( 3) :	= 4.025	BASE TAP NO	1,000		
		369.000	2624	*	,
		370.999	2816		
		371,999	2519		
		372 .999	2972	•	
		373.999	2611		
		374.999	2351		
		375.999	2853		
		376.999	1983		~ 5°
		377,000	2531		有品
		378 .999	2214		₩ £
	*	379.000	2008		· ØH
	•	389.999	1646		28
	•	391.000	1917		. 20 🕰
	•				OF POOR QUALITY
ALFHA ( 3) = 3.657 BETA ( 1) =	ecc. :	BASE	1.000		77 77
		TAP NO			#5
		369.000	2611		HE
		379.999	2622		7
		371 .000	2682		A 55
		372.999	2630		
		373,999	2756		
the state of the s	and the second	374.990	2392		
	•	375,999	2764		
		376.999	1913		
		377.000	2670		
		376.000	2288		
		379.000	1992		
	100	389.990	1618		
		381,000.	1939		

.000

1.499

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ORB BASE

(REUG21) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

e.000 E.V-08 =

.000 HACH =

SREF = 2690.0000 SQ.FT. XMRP LREF = 1290.3000 IN. YMRP BREF = 1290.3000 IN. ZMRP SCALE = .0200	דץ .או פפפפ. =		ELV-18 = RUDDER = GİMBAL =
SECTION ( 1) ORBITER BASE	DEPENDENT VA	RIABLE C	
ALFHA ( 1) = -4.200 BETA ( 1) =	.003 BASE	1.000	
	TAP NO		•
	369.000	2822	•
	370.000	2897	•
	371.000	2768	
•	372.000	2661	
	373,000	~.2595	
	374.999	2791	
	375,000	2768	
	376.999	2774	
the first of the second second	377.000	2765	7-
	378.000	2725	₩ <b>2</b>
	379.000	2836	1 B
	380,900	2805	8 €
	381.000	2828	<b>5</b> 2
A Cut ( 6) - 465 DPT ( 4 )			DRIGINAL PAGE IS
ALPHA ( 2) =180 BETA ( 1) =	-4.000 BASE	1.000	<u>න</u> ` .
	CM PAT		Z 72
	369.000	3035	F 6
	370.000	2939	
	371.000	2905	₹~
	372.000	2619	, Q.
	373,900	2758	
	374.000	2815	
	375.000	2891	
	376.000	2873	
	377,000	2873	
	378,000	2863.	
•	379,000	2931	
	390.000	2889	
	381,000	2937	
ALPHA ( 2) =291 BETA ( 2) =	.012 BASE	1.000	
The state of the s	CA PAT	**###	
•	369.000	2765	• •
	370,090 000,075		
	371.000	-,2701 -,2664	
$\mathcal{L}_{\mathcal{A}} = \mathcal{L}_{\mathcal{A}} = $	372,000	2536	
			·
	373.000 374.999	2466	
	374.999	2733	

375.000 -.2692 375.000 -.2691 377.000 -.2664

(REUG21)

•	ARC	11-0141419 3	S+STRUT SRB	-OFF MPS-OFF	ORB BASE
SECTION ( 1) ORBITER BASE		DEPENDENT VA	RIABLE CF		•
LFHA ( 2) =291 BETA ( )	210. = (2	BASE TAP NO	1.000		
•		378.000	2639		
		379.000			
		380.000	2724		
		381,000	2749		
_PHA ( 2) =306 BETA ( 3	3) = 4.928	BASE TAP NO	1.999		
•		369.000	2963		
		379.000			
		371,999	2816		
		372 .999	2811		
		373.999	2669		
		374.000	2855		
		375,000	- 2879		
		376,000	2861		
		377,000	2864		
		378 .000			
An and the second secon		379.000	2949		
•		390,000	2913		
		381.000	2927		
PHA ( 3) = 3.969 BETA ( 1	) = .006	BASE TAP NO	1.000		
		369.000	2904		
•	•	370,000	2789		
		371 .999	2762		
		372.999	2695		
		373.000	2545		
		374.920	2943		
		375,000	2833		
		376,999	2953		
		377 .000	2809		
		378.999	2722		
		379.000	2997		
		389.999	2872		
			2849		

1.499

ARC11-014TA19 OTS+STRUT SRB-NOW NFS-NOW ORB BASE

(REUG22) ( 94 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

1.000

RUDDER = GIMBAL =

8.000 ELV-08 =

# HOAM CCC.

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRP = YMRP = ZMRP =	* -	IN. YT	
SECTION ( 1) ORBITER BASE		DEPE	ENDENT VAR	ABLE OF
ALPHA ( 1) = -4.167 BETA	(1) =	.006	BASE	1.000
			TAP NO	
			369 .999	2825
			379.999	2887
			371.999	2955
			372.993	2863
-				3010
			374.999	2604
			375.999	3918
			376.999	2318
			377,000	2967
			378.090	-,2799
			379.000	2280
		•	389.999	2075
			381.993	2348
ALPHA ( 2) =348 BETA	(1) = -3	.997	BASE TAP NO	1.000
			369.000	3187
			370.000	- 2895
•			371.000	3155
			372.000	2858
· ·				3179
<b>v</b> .			374.999	2725
•			375,999	2937
			376,000	2487
			377.990	3119
			378.000	2856
			379.999	2534
. • · · · · · · · · · · · · · · · · · ·			389,999	-,2353
			381.000	2459
ALPHA ( 2) =366 BETA	(2) =	.012	BASE	1,000
	•		TAP NO	
			369.000	2797
		•	379.999	2789
•			371.000	2874
			372,000	2798
			373.000	2931
		4	374.999	2548
			375.000	2980
•			376.000	-,2279
			377.999	2917
			3.1.500	

**K**---

- FAGE 1255

	ARCII-DIAIAID OTS+STRUT	Srb-non nes-non (	RB BASE

(REUGZZ)

	THE BASE
SECTION ( 1) ORBITER BASE	DEPENDENT VARIABLE CP
ALPHA (2) =366 BETA (2) = .0	ECC. 1 SAAB SIG
	376.9992586 379.9992274
	380.0002135
	381.9992285
	301.3337203
ALPHA ( 2) =522 BETA ( 3) = 4.0	31 BASE 1.000
	TAP NO
	TAF ND  369.0002878  370.0002878  371.0002813  372.0003083  373.0002873  374.0002666  375.0003054  376.0002315  377.0002856  376.0002584  379.0002584  379.0002441  380.0002441
	370.0003063
	371.0002813 QH
•	372 .0003083
	373.0002873
	374.9992666
	375.0003054
	376.0002315
	377.0002856 日日
	378.0002584
	379.0002441
	-12121
	381.0002399
10. = (1) ATBB SA.01 = .01	2 BASE 1.990 CM PAT
	369.0002921
	370,0002900
	371.0002929
• •	372.0002870
	373,999 -,2975
	374,9902699
	375,0003025
	376.0002316
	377.0002901
	378.0002657
•	379.0002397
	380.0002126
	704 000

,999

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ORB BASE (REUG23) ( 04 FEB 75 )

## REFERENCE DATA

### PARAMETRIC DATA

.ccc,

.000 1,000

ELV-18 =

RUDDER = GINBAL =

SREF = 2690.0000 \$Q.FT. LREF = 1290.3000 \$N. BREF = 1290.3000 \$N. SCALE = .0200	XMRF = 976.0000 IN YMRF = .0000 IN ZMRF = 400.0000 IN	YT
SECTION ( 1) ORBITER BASE	DEPEND	ENT VARIABLE CO
ALPHA ( 1) = -4.047 BETA	· ·	ASE 1.000 AP' NO
		.0002211
		0.0002222
	_	2161
		2.9902251
		3.9992187
		1,0002326
		5.0002381
		5.000 -,2378
		7.0002356
		3.9992389
		.9092511
		.0002537
		.9002535
ALPHA ( 2) =276 BETA	(1) = -4.995	ISE 1.999
		· CN FI
	369	.9092657
	379	1.0002455
	37:	.9902373
	372	2.0002609
• • •	373	.0002495
	374	.9992674
	375	.0002693
	379	.0002694
	377	.0002659
	378	2.9992792
	379	.0002808
	389	1.0002853
	381	.0002825
ALPHA ( 2) =237 BETA		SE 1.000
		IP NO
		.0002278
		.0002176
		.0002137
		.0002257
		.0002182
		.0002315
		.2319
	The second secon	.0902393
	377	.0002221

	AR	C11-014TA19 Of	S+STRUT SR	3-0
SECTION ( 1) DESTRE BASE		DEPENDENT VA	RIABLE CP	
ALPHA ( 2) = -:237 BETA ( 2)	= .009	BASE CA PAT		
				٠.
			2233	
	•	379.000		
			2311	
		281.000	2356	·
ALPHA ( 2) =195 BETA ( 3)	= 4.928	BASE TAP NO	1,000	
		369.000	•	
		370.000		
· · · · · · · · · · · · · · · · · · ·	•	371,000		
		372,000		
		373.000		
		374.000		
		375.000	2453	
		376.999	2535	
		377,999		
		378,999		
		379.000		
		380,000	2510	
e 🚅		381.000	2593	
			2333	
ALPHA ( 3) = 3.855 BETA ( 1)	003	BASE	1.000	
		CN PAT		
		369.000		
		370,000	2993	
		371 .999	1976	
		372,999	2099	•
		373.999	1988	
		374.999	2255	
		375.999	2193	
e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de		376,999	2193	
		377.000	2160	
		378.000	2150	7.
		379.000	2267	
		389.993	2224	
		381.000	2287	

ŧ

(REUGES)

ORIGINAL F.-

ARC11-D14TA19 OTS+STRUT SRB-OFF MFS-OFF ORB BASE

(REUG24) ( 04 FEB 75 )

PARAMETRIC DATA

#### REFERENCE DATA

= 80-V\_G 000. .000 ELV-IB = SREF # 2690,0000 \$0.FT. XMRP = 976,0000 IN. XT RUDDER = ,000 MACH = 1.199 TY ,NI CCCC = 1399, 3000 IN. YIRF = .0000 IN. YI 2MRP = 490.0000 IN. 2T GIMBAL = BREF = 1290.3000 IN. 1.000 SCALE =

SECTION ( 1) ORBITER BASE

DEPENDENT VARIABLE OF

ALPHA (1) =  $-3.993 \cdot 8ETA$  (1) = -0.009BASE 1.000 TAP NO 369.000 -.3626 370,000 -.3393 371,000 -.3512 372,000 -.3573 373.000 -.3396 374.999 -.3566 375.000 -.3533 376.000 -.3529 377.000 -.3551 378.000 -.3530 379.000 -.3569 380,000 -.3544 381.000 -.3603 ALPHA (2) = -.279 BETA (1) = -4.003BASE 1,000 TAP NO 369.000 -,3997 370.000 -.3922 371.000 -.3785 372,000 -.3970 373.000 -.3907 374.000 -.3970 375.000 -.3956 376.000 -.3924 377,000 -.3905 378,000 -.3921 379.000 -.4009 389.999 -.3981 381.000 -.3956 ALPHA ( 2) = -.249 BETA ( 2) = .009 BASE TAF NO 369.000 -.3623 379.990 -.3325 371.000 -.3493 372,000 -.3514 373.000 -.3297 374,000 -.3556 375.000 -.3495 376.000 -.3514 377.000 -.3529

### ARC11-0141A19 OTS+STRUT SRB-OFF MFS-OFF ORB BASE

(REUG24)

SECTION ( 1) SETTERCE ) INCTIONS	DEPENDENT VARIABLE CI	-
ALPHA (2) =246 BETA (2) = .009	BASE 1.000	
	378.9993484	
	379.0003566	
	389.9993545	
	381.0003590	
ALPHA ( 2) =273 BETA ( 3) = 4.025	BASE 1.000 CA PAT	
	369.0004095	
	379.9993916	
	371.9993958	
e <sup>a</sup> .	372.0003954	
	373.0003917	
	374.9993986	
	375.9903975	
	376.9994939	
	377.9994964	
	378.0004093	
	379.9994929	
	389.9994976	
	391.9004118	
ALPHA ( 3) = 3.804 BETA ( 1) =003	BASE 1.999	
	CM PAT	
	369.0003768	
	370,9993564	
•	371.0003665	
	372.9993797	
	373.0003460	
	374.0003766	
	375.0003663	
	376.0003699	
	377.0003694	
	378.9993662	
	379.0003762	
	389.9903737	
	381.9993762	

```
ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ORB BASE
```

(REUG25) ( D4 FEB 75 )

#### REFERENCE DATA

KC, CACIACE DATA		PARAMETRIC DATA
SREF = 2690.0000 SQ.FT. XMRP LREF = 1290.3000 IN. YMRP BREF = 1290.3000 IN. ZMRP SCALE = .0000	TY ,NI CCCC. =	ELV-18 = .000 ELV-08 = .000 RUODER = .000 MACH = 1.250 GIMBAL = 1.000
SECTION ( 1) ORBITER BASE	DELENDENT ANTINGTE C	
ALPHA ( 1) = -3.975 BETA ( 1)	= .003 BASE 1.000 TAF NO -3079 -300.076 370.000 -2001	
	371.0002961 372.0003000	

-.2912

-.2990

377.999 -.2999 378.000 -.3997 379.000 -.2999 -.3001 389.999

381,000 -.3058

375.000 -.2985 376.000 -.2990

373,999

374,999

ALPHA ( 2) = -.255 BETA ( 1) = -4.000

BASE TAF NO 369.000 -.3322 379.990 -.3249 371.000 -.3187 372.999 -.3093 373.000 -.3255 374.990 -.3198 375.000 -.3219 376.000 -.3198 377.000 -.3296

378,000 -.3266 379.000 -.3316

389.990 -.3235 381.000 -.3260

ALPHA ( 2) = -.289 BETA ( 2) = .012

BASE 1.000

TAP NO 369.000 -.3031

370.000 -.2894

371,000 -.2938 372,999 -.2919

373.000 -.2753

374.999 -.2959

375.000 -.2927

376,999 -.2911

377.000 -.2928

## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1261

## ARC11-0141A19 OTS+STRUT SRB-JFF MPS-OFF ORB BASE

(REUG25)

	ARCI	1-0141A19 OF	S+STRUT S
SECTION ( 1) ORBITER BASE		DEPENDENT VAR	TABLE CP
ALFHA ( 2) =285 BETA ( 2) =	.012	BASE TAP NO	1.999
•		378.000	-,2911
		379.000	2965
	•	380,000	2942
		381.000	2983
ALPHA ( 2) =189 BETA ( 3) =	4.931	BASE TAP NO	1.000.
		369.000	3362
		379.999	
		371,999	
•		372.999	3266
		373.999	3171
	.•	374.999	3271
•		375.000	3254
		376.000	3260
		377,999	3287
		378 .990	3394
	* • •	379.999	3295
		380.000	3325
		381.993	3326
ALPHA ( 3) = 4.905 BETA ( 1) =	.003	BASE	1.999
•		CH TAT	
		369.000	3252
		370.999	3124
		371.000	3141
		372.999	3193
	•	373.000	3939
		374.999	3252
		375.999	3185
		376,000	3197
	•	377 .000	3174
		378.999	3179
		379,999	3258
		380.999	-, 3234
		381,000	3244

ARCII-DIATAIS ORS-STRUT SRB-OFF MIS-OFF ORB BASE (REUG26) ( D4 FBB 75 )

#### REFERENCE DATA

### PARAMETRIC DATA

= 8C-V\_3 CCC. QUODER = .000 MACH = 1.400 GENBAL = 1.000

ELV-18 =

\$REF = 2690,0000 SQ.FT, LREF = 1290,3000 IN. BREF = 1290,3000 IN, SCALE =0200	YMRF =	10000 IN. XT 10000 IN. YT 10000 IN. ZT	
SECTION ( 1) ORBITER BASE		DEPENDENT VARIABLE OF	
ALPHA ( 1) = -3.909 BETA	(1) = .009	BASE 1.000	
		TAF NO 369.0002690	
e e e e e e e e e e e e e e e e e e e		379.9992624	
		371.0002602	
		372,9902582	
		373,9992596	
		374.9992621	
· Section of the sect		375.9992619	
		376.9992594	
		377.9992599	
		378.0002613	
		379.0002658	
		389,9992639	
		381.9902693	
		,200	
ALPHA ( 2) =243 BETA	(1) = -4.999	BASE 1.999	
		TAP NO	
		369.0002905	
		379.9992754	
		371.9902774	
		372.0002508	
		373.0002728	
		374.9992698	
		375.9992757	
No.		376.9992731	
	and the second second	377.990 -,2745	
		378.9992777	
		379,9002790	
•	•	389.9992754	
		381.9992773	
ALPHA ( 2) =237 BETA	(2) = .012	BASE 1.000	
	.512	TAP NO	
		369.0002645	
		379.9902545	
		371.0002512	
		372.9992535	
		373.9992388	
		374.9992595	
		375.9992559	
		376,999 -,2557	
		377.0002537	

FAGE 1263

ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF ORB BASE

(REUG26)

SECTION ( 1)OF	BITER BAS	E		DEPENDENT VAR	RIABLE CF		
ALPHA ( 2) = -	237 BET	A (2)	= .912	BASE TAP NO	1,999		•
				378,000	2518		
				379.000	2616	•	
				380,000	2587		
				381,999	2604	.** •	
ALPHA ( 2) = -	234 BET	(E) A1	= 4.931	BASE TAP NO	1.000		
				369.000	2892		4
				370.000	2782		
				371,000	2646	•	$\mathcal{E}_{\mathcal{E}}$
				372,000	2779		Š
				373.000	2559	•	~~
• 1 -	•:			374,999	2765		න ්
				375.000	2757		Ä
				376,000	2757		2 2
				377,090	2765		FOOR QUALITY
	•			378 000	2763		
			•	379,000	2822		. S
				380.000			
				391.000	-,2796		
ALPHA ( 3) =	4.047 BE	TA (1)	= ,906	BASE	1.999		
				CM PAT			
				369.000	2787		
				379,000	2652		
		•		371.999	2621		
				372.999	2634		
				373.999	2463		
				374.000	2692		
				375,999	2657		
	• .			376,000	2661		
				377.929	2663	•	
•				378.000	2677		
	* * .			379.000	2798		
				380.000	2706		
				391.000	2739		

.900

- ARC11-0141A19 OTS+STRUY SRB-NOM MPS-NOM ORB BASE

(QEUG27) ( D4 FEB 75 )

### REFERENCE DATA

#### PARAMETRIC DATA

. HOAM CCC

= 80-V.B = 000. = 81-V\_B

1.000

RUDDER = GIMBAL =

SREF LREF BREF SCALE	** **	129	9,999999999999999999999999999999999999	IN.	XMRP YMRP ZMRP	= .	9999 IN. XT 9999 IN. YT 9999 IN. ZT	
SECT	ION	( 1	ORBITER	BASE			DEPENDENT VA	RIABLE C=
ALPHA	( 1	) =	-4.125	BETA	(1) =	.000	BASE	1.999
							TAP NO	
							369.000	4945
					•		379.999	5006
							371.000	5006
							372.990	5193
							373.999	5244
					•		374.999	4260
							375.999	5263
							376.999	3936
							377.000	
							378.000	4751
							379.000	~.3637
							389.999	3176
							391.000	4042
LPHA	( 2	) =	396	BETA	(1) =	-4 .003	BASE	1.000
							CN FIAT	
							369.000	4854
							379.999	5031
			. •				371.000	4954
							372.000	5168
		,					373.999	5234
							374,999	4699
							375.000	5355
							376.000	4227
							377.000	5099
							378.999	4977
					•		379.999	3959
		٠.					380.000	3728
							381.000	4763
_FHA	( 2)	=	49	BETA	(2) =	.009	BASE	1.000
							TAP NO	
							369.000	4883
							370.000	4803
							371.000	4757
						*	372.000	4696
							373.000	4793
							374,999	4953
							375.000	-,4885
							376.000	3547

FAGE 1265

(REUG27)

#### ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM ORB BASE SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CF ALFHA ( 2) = -.498 BETA ( 2) = .009 BASE 1,000 CH PAT 378,999 -.4121 379.000 -.3306 380.000 -.2897 381.000 -.3434 ALPHA ( 2) = -.336 BETA ( 3) = 4.025 BASE . 1.959 TAP NO 369.000 -.4818 370.000 -.4879 371.000 -.5195 372.999 -.4974 373,000 -.5351 374.000 -.4568 375.000 -.5295 376,000 -.4935 377,000 -.4944 378.000 -.4594 .379.000 ~.3912 389,999 -.3225 381.000 -. 4165 ALPHA ( 3) = 3.792 BETA ( 1) = -.993BASE 1.000 CH FIAT 369.000 -.4394 379.999 -.4565

371 .000

372,999

373,999

374.990

375.000

376,999

377.000

378.999

379.999

389.999

381.000

-.4593

-.4554

-.4599

-,3896

-.4549

-.3355

-.4011

-.3815

-.3293

-.2831

-.3297

1.199

ARC11-014TA19 OFS+STRUT SRB-NOM NES-NOM ORB BASE

(REUG28) ( 94 FEB 75 )

#### REFERENCE DATA

## FARAMETRIC DATA

RUCDER = GINBAL =

.000

1 .000

SREF = 2690,0000 SQ.FT.		199 IN. XT 199 IN. YT	
LREF = 1290,3000 IN.	• • • • • • • • • • • • • • • • • • • •	ioo in. Ti	
BREF = 1290.3000 IN. SCALE = .0200	ZMRP = 400.0	133 114. 21	•
SCALE = .0200			
SECTION ( 1) ORBITER BASE		EPENDENT VARI	ABLE C
ALPHA ( 1) = -4.191 BETA	( t) = .003	BASE TAP NO	1.000
	•	369.000	4925
		370.000	4915
		371.999	5110
		372.000	4845
		373,000	5039
		374.999	4465
		375.909	5119
		376.999	4146
•		377.999	5912
		378.993	4758
	•	379.000	3833
		389,999	3745
- *		381.000	4290
		BASE	1.000
ALPHA ( 2) =465 BETA	(1) = -4.003	· · · -	T.CCC
•		TAP NO 000.965	5477
• •			5006
			-,5511
			5274
			5458
			5949
			5384
			4557
•			5507
			5139
			4521
			4119
		•-	4714
•			
ALPHA ( 2) =44 BETA	(2) = .012	BASE	1,000
		CH PAT	
			~.4795
	*, .		4774
			4952
			4713
		373.000	4939
			4416
<b>a</b>			5041
			4046
		377,999	4993



# ARC11-014TA19 OTS+STRUT SRB-NON NPS-NOM ORB BASE

(REUG28)

	MCII-DIAINIA DISASIRO	1 5
SECTION ( 1) ORBITER BASE	DEPENDENT VARIABLE	CF
FHA ( 2) =447 BETA ( 2) = .	CO.1 32AB 21C	o
	378.000460	<b>E</b> 0
	379.99037	
· · · · · · · · · · · · · · · · · · ·	389,00036	
•	381.00042	
.FHA ( 2) =405 BETA ( 3) = 4.	031 BASE 1.000	•
	CN PAT	J
And the second second second second	369,999525	
	379.999534	43
	371,999519	94
	372.999534	10
	373.000549	Ü
	374.999493	35
	375.000546	32
	376.999439	96
•	377,000530	
	378,900509	3
	379.000447	6
	380.000401	6
	381,000468	2
GHA ( 3) = 3.819 BETA ( 1) = .0	09 BASE 1.000	i
	CA PAT	
	369.999595	3
	379,999 -,595	-
•	371.999515	
	372.999494	4
	373.990514	2
•	374.990 -,478	6
	375,9995391	7
	376.0004234	4
	377.9995136	4
	378.9994998	5.
	379.0004151	i
	389.0003899	•
	381,0004391	

ARC11-014TA19-075+STRUT SRB-NON MPS-NON ORB BASE

(REUG29) ( 84 FEB 75 )

## REFERENCE DATA

### PARAMETRIC DATA

LREF	=	2690.0000 SQ.FT. 1290.3000 TN. 1290.3000 TN.	XMRP YMRP ZMRP	דץ או פפפפ.		ELV-18 RUDDER GIMBAL	=	-	ELV-OB MÀCH	=	.000 1 .250
		•									

377.000 -.3691

NCTT338	( 1) ORBITER	BASE	•		DEFENDENT VA	RIABLE C
ALPHA (-1	) = -4.989	BETA	(1)=	.996	BASE	1.999
					TAP NO	•
	•				369 .000	3632
					370.000	_
					371.000	3996
•					372.000	3608
					373.000	3808
					374,090	3357
					375.000	3898
					376.000	3062
					377,999	3809
•					378,000	3531
	•				379,000	2597
					380,000	-,2719
•					391,000	3078
ALPHA ( 2)	=375	BETA	(-1) = -	3 . 997	BASE	1,000
-	•				CM PAT	
		·			369.000	4094
					379.999	3680
	•				371.000	4125
	•				372.000	3796
					373.000	4988
* .					374 .000	3558
					375.000	~.3936
					376.999	3350
					377.999	4145
•					378.000	3779
	•				379,000	3163
					380.000	2856
	* *				381,000	3225
ALPHA ( 2)	= -,40#	BETA	(2) =	.012	BASE	1.000
					CM PAT	*
					369.000	3663
					379.999	3649
					371.000	~.3739
					372.000	3579
					373.999	3788
	•				374.000	3393
					375.000	3845
					376.999	-,2972
					755 244	

## ARCII-DIATAIS OFS+STRUT SRB-NON NFS-NOM ORB BASE

(REUGES)

•	•				1424 14.3-1424	260 0425
PETTENCE 1 NOTES	BASE	3	ependent vai	riable cr		
NLPHA ( 2) =458	BETA ( 2)	\$10. ×	SASE CA FAT	1.000		
			378.000	3489		
			379.950	2735	4.	
	•		389.000	2650		
en en en en en en en en en en en en en e			381,000	3028		4
NLPHA ( 2) =381	BETA ( 3)	* 4.931	BASE CA PAT	1,999		ORIGINAL PAGE IS OF POOR QUALITY
			369.000	3978		
			370.000	4005		08
			371,999	3811		02
			372 .000	4932		₹ 🗲
•			373.000	3916		D .
			374,000	3562		Ø 79
	•	•	375.000	4059		A A
			376,999	3173		口段
			377,000	3901		33
			378.000	3697		~ <i>5</i>
			379.000	3237	,	
			380.000	2759		•
			381.000	3269		
LPHA ( 3) = 3.843	BETA (1)	= .003	SASE .	1.990		
	•		TAP NO			
•			369.000	3922		
•			370,000	~.3899		
			371.000	3905		
			372,999	3716		
		* +	373.000	-,3902		
			374.000	3526		
		•	375.000	4016		
			376,000	3934		
			377 .999	3851		•
			378.999	3609		
			379.000	2941	•	
			380.000	2697		
			381.999	3137		

389.990 -.2255 381.999 -.2271

376.999 -.2265 377.999 -.2977

## ARC11-9141A19 OFS+STRUT SRB-NON MPS-NON ORB BASE

(REUG30) ( 04 FEB 75 )

#### REFERENCE DATA

## PARAMETRIC DATA

SREF = LREF = BREF = SCALE =	2690.0000 50.FT. 1890.3000 IN. 1890.3000 IN.	XMRF = YMRF = ZMRF =	976.0000 IN. XT .0000 IN. YT 490.0000 IN. ZT	ELV-IB = RUDDER = GIMBAL =	.000 .000 1.000	ECC. = BC-V.G ECA.1 = HOAM
SECTION	( 1) ORBITER BASE		DEPENDENT VARIABLE C			
ALPHA (	1) = -4.224 BETA	(1) =	.006 BASE 1.000 TAP NO		•	•

369.000 -.2785 370.000 -.2817 371.000 -.2865 372.999 -.2773 373.000 -.2909 374,000 -.2562 375.999 -.2997 376.000 -.2233 377.000 -.2881 378.000 -.2696 379.000 -.1981 380,000 -.1914 381.000 -.2259

ALPHA ( 2) = -.444 BETA ( 1) = -3.997 BASE 1,000 CA PAT 369.000 -.3155 379.999 -.2765 371.000 -.3181 372.000 -.2872 373,000 -.3145 374 .000 -.2711 375.000 -.3002 376.000 -.2482 377.593 -.3147 378.000 -.2826 379.000 -.2360

ALFHA (2) = -.405 BETA (2) = .016 BASE 1.000 TAF NO 369.000 -.2824 370.000 -.2846 371.000 -.2880 372.000 -.2781 373.000 -.2936 374.000 -.2560 375.000 -.2954 DE POOR QUALITY

## ARC11-014TA19 OFS+STRUT SRB-NOM MFS-NOM ORB BASE

(REUG3D)

SECTION ( 1) ORBITER BASE			DEPENDENT VA	RIABLE CF
ALPHA ( 2) =405 BETA	( 5) =	.016	BASE TAP NO	1.000
in the second second			378.000	2566
•	•		379.990	2078
		•	389.999	1979
			381.000	2141
ALPHA ( 2) =360 BETA	(3) =	4 .931	BASE TAF NO	1.000
			369.000	2917
			370.000	2996
			371.999	2788
			372.000	3039
			373.000	2849
			374.000	2559
	•		375.000	3025
•			376.000	2296
			377.000	2859
			378.999	2543
•			379.000	2257
			389.999	1937
			381.000	2198
ALPHA ( 3) = 3.819 BETA	(1) =	.009	BASE	1.999
	•		CN TAT	
			369.000	2916
			370.000	2939
		•	371.000	2958
			372.999	2874
			373.999	3912
•		•	374.999	2656
			375.000	3966
			376.999	2294
			377.000	2981
			378.000	2652
			379.000	2293
			380.000	1991
			381.000	2214

ORIGINAL PAGE IS

.900

ARC11-0141A19 OTS+STRUT SRB-OFF NPS-OFF ORB BASE (REUG31) ( D4 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

,000

2.000

ELV-IB = RUDDER = GIMBAL =

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN.	XMRP YMRP		TX .NI 0000.		•
89EF = 1290.3000 IN.	ZMRF	= 499	.0000 IN. 2T		
SCALE = .0200			•		
SECTION ( 1) ORBITER BASE	•		DEFENDENT VAR	siabi'e d≥	
ALPHA ( 1) = -4.020 BETA	( 1) =	.996	BASE	1.000	• •
•			TAP NO		
			369.000	2252	
			379.999	1939	
			371.000	2326	
			372,000	2216	
			373.000	.0000	
4 - 4			374,999	2236	
		_	375.000	2296	
- · · · · · · · · · · · · · · · · · · ·			376.000	-,2190	
			377.000	2178	*
-			378.000	2180	
			379,000		
	•		380,000	2338	
			381,000	2350	
					•
ALPHA ( 2) =288 BETA	(1) =	-4.003	BASE	1.000	
			CN PAT		
			369.000	2888	
			379.000	· · · ·	
		•	371,000	2577	
			372,000	2595	
•			373.999	. פפפת	
			374.999	~.2599	
			375.999	2540	
			376.999	2650	
•			377.900	2615	
			378.000	2619	
			379.999	2693	
			380,000	2735	
			381.000	2682	
•					•
ALPHA ( 2) =279 BETA	(2) =	.009	BASE	1.999	
			CM FAT		
			369.000	2296	
			379.999	1914	
			371.999	2267	•
grand and the second of the second			372.999	2218	
			373 .999	.סססס	
			374.000	2145	
			375.000	2121	
			376,000	2177	
			377.000	2122 .	

## ARC11-014TA19 OTS+STRUT SRB-OFF NFS-OFF ORB BASE

(REUG31)

NCTTOS	( 1)	CRBITER	BASE			DEPENDENT VA	RIABLE CP
PHA ( 2	2) =	-,279	BETA	( 2) =	.009	BASE TAP NO	1.000
						378.000	2056
						379.000	2144
						389.000	2109
						381,000	2154
						201,435	-,2134
FHA ( 2	2) =	264	BETA	(3) =	4.031	BASE	1.000
	•			, •, -	*****	TAF NO	1.000
						369.000	2366
		•				370.000	2131
						371.000	2497
						372.000	2378
•						373.000	.0000
•						374.000	2246
						375.000	-,2217
						376,000	-,2266
						377,000	2288
						378,000	2397
						379,000	2462
						380.000	2452
•						381.000	2515
PHA ( 3	) =	3,978	BETA	(i) =	.000	BASE	1.999
						CN PAT	
						369.000	2044
						379.999	1766
					-	371,999	2115
		•				372.000	2038
						373.999	כמפם.
						374.990	-,2946
						375.000	1942
		. •				376.000	2945
	•					377 .000	2036
						378.000	1972
						379.000	2121
			• •			380.000	-,2131
						381.000	2133

## ARC11-014TA19 OFS+STRUT SRB-OFF MFS-OFF ORB BASE

(REUG32) (-04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

000,

ELV-18 = RUODER = GIMBAL =

ref Ref Cale	: :	1290	.3000 .3000 .0200	IN.	YMRP ZMRP	7		.0000 .0000	IN. IN.	YT ZT		
SECT	NCI	( 1)	TIESC	R BASE	•			DEPE	NDE	NT VA	I ABLE OF	
LPHA	(	1) =	-3.90	S SETA	(1)	2	,000		BAS		1.000	
								-		3 NO	3000	
										.000	3229	
										.000	3191	
										.000	~.3645	
										מכני,	-,3400	
										.000	.0000	
										.000	3355	
										.000	3293	
										בככי.	3355	
			•							.000	3352 3348	
			•	•	* .					מממ. מממ.	3420	
										מפפ	3390	
•										,000	-,3427	
									.501	, true	-, 3461	
		a\ -	- 26	5 BETA	. (4)		4.990		BA	qF	1.999	
14-CH4	. •	£/ -	63	3 5517	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	-	7.000			CN F	••••	
										ממפ	3455	
										מפפ,ו	3466	
										מממ.	3739	
										מממ	3514	
										,000	.0000	
											3579	
										000	3486	
										כככ.	3551	
									-	מפפי		
										.000	3577	•
										,000	3662	
					•.					0.000	3665	
										פמפ,	3544	
N_PHA		<b>9</b> ) =	- 21	4 BETA	A (2)	=	.009		94	SE	1.999	
	•	•, -		• •••		_				כא א		
										פפפ.	3046	
										ככפ, נ	2854	
										כמם.	3375	•
			,							מפפי.	3195	
										.000	, פפפפ	
					•					ככפ.	3096	
										000.5	3934	
			•							5,000	3098	
	٠									2.000	-,3099	

374.990 -.3326 375.000 -.3281 376,000 ~.3324 377.999 -.3396 378.909 -.3278 379.999

389.999

381,000

-.3429

-.3373

-.3499

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF ORB BASE

#### SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CP ALPHA ( 2) = -,213 BETA ( 2) = ,009 BASE 1,000 TAP NO 378.000 -.3083 379.000 -.3181 389,999. -.3142 381.999 -,3169 ALFHA ( 2) = -.219 BETA ( 3) = 4.028 BASE CH PAT 369.000 -.3695 379.000 -.3543 371.000 -.4173 372.999 -.3612 373.999 פפפפ. 374.999 -.3668 375.000 -.3641 376.000 -.3716 377,000 -.3694 378 - 999 - . 3775 379.000 -.3858 389.999 -.3847 381.000 -.3852 ALPHA ( 3) = 3.98 BETA ( 1) = .000 BASE 1.000 TAP NO 369.000 -.3255 370.000 -.3144 371.000 -.3542 372.000 -.3330 373.000 .9999

(REUG32)

FAGE 1276

ARC11-014TA19: OTS+STRUT SRB-OFF MES-OFF ORB BASE (REUG33) ( 04 FEB 75 )

#### REFERENCE DATA

### PARAMETRIC DATA

		129	0.0000 0.3000 0.3000	IN.	Τ,	XMRP YMRP ZMRP	=		. 2222 1 . 2222 1 . 2222 1	N. YT	•		ELV-18 : RUDDER : GIMBAL :	000	= 8C-V_G = HOAM
SCALE	=		.0200												
SECT	ION	i ( 1	) ORBIT	ER B	ASE				DEPE	DENT VAR	RIABLE CO				
ALPHA	(	1) =	-4.04	4 8	TA	(1)	=	.003		BASE	1.900		•		
										TAP NO	2696				
										69.000	2547			•	
										979.000 971.000	3192	-			
								•		372.000	2824				
										373.000	כממפ.	•			
										374.999	2899				
										75.000	2726				
										76.000	2792	•			
										277.000	2816				
										378.990	2834				
										379.000	2946				
										380,000	2897				
										381.000	2938				,
ALPHA	. (	2)	19	<b>A</b> B	ETA	(1)	,= -	4.000		BASE TAP NO	1.000				
				. *	,					369,000	2844				
.*										370,000	3085				
										371 .000	3265				
										372.000	3039				
										373.000	.0000				
										374,000	3117				
									•	375.000	3931			•	
										376.999	3191				
										377.000	3191				
										378,999	3148				
										379.000	3215				
										380.000	3178				
										381,999	3166			*	
ALPHA	(	2)	1	62 8	ETA	( 2)	±	.009		BASE	1,000	. •			
						•				TAP NO					
										369.000	2729				
	•									מפס. פלב	2645		•		
										371.000	3167				
										372.999	2817				•
				• • • •						373.999	.0000				
										374.000	2812				
										375.999	2754				
										376.999	2923				
										377.000	2847				

380.000 -.3110 381.000 -.3116 PAGE 1277

### ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ORB BASE

(REUG33)

SECTION ( 1)	ORBITER	BASE			DEPENDENT VAR	TABLE CP	
LEHA ( 2) =	162	BETA	( 2) =	.009	BASE TAP NO	1.000	
					378.000	2862	*
					379.000	2936	
					380.000	2906	
					381.000	2921	
ALFHA ( 2) =	219	BETA	( 3) =	4.931	BASE NO PAT	1.000	
					369.920	3169	
					370.000	+.3151	
					371.000	- 3647	
					372.000	3197	
					373.000	.0000	
•					374.000	3198	
					375.000	3198	
					376.000	3179	
					377.999	3210	
					378.000	3273	
				*	379.000	3345	
					380.000	3324	
					381.000	3343	
ALFHA ( 3) =	3.84	BETA	(1) =	.993	BASE CM PAT	1.999	
					369.000	2916	
					370.000	2909	
					371,999	3291	
			,	•	372.000	3037	
					373.999	.0000	
	••				374.990	3059	
					375.999	2977	
	•				376.999	-,3040	
					377 .999	3032	
					378.999	3043	•
					379.000	3179	

DE POOR QUALITY

```
ARC11-D14TA19 OFS+STRUT SRB-OFF HFS-OFF ORB BASE
```

(REUG34) ( 94 FEB 75 )

#### REFERENCE DATA

SREF = 2699.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290,3000 IN. YMRP = .0000 IN. YT BREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT SCALE = •ນຽນນຸ

ELV-IB = = 8C-V\_B 000. 1.400 GINBAL = 2.000

PARAMETRIC DATA

376,000 -.2455 377,000 -.2479

SECTION ( 1) DRBITER BASE DEPENDENT VARIABLE OF ALPHA (1) = -3.981 BETA (1) = .000 BASE 1.000 TAP NO 369.000 -.2051 379.999 -.2458 371.000 -.2831 372.000 -.2561 373.999 ממפם. 374.900 -.2540 375.000 -.2478 376.000 -.2489 377.000 -,2515 378,000 -,2555 379.000 -.2639 380,000 -.2565 381.000 -.2610 ALPHA ( 2) = -.231 BETA ( 1) = -4.000 BASE 1.000 CH PAT 369.000 -.2231 370.000 -.2732 371.000 -.2952 372.000 -.2739 373.999 במפפ. 374 .999 -.2745 375,900 -.2656 376.999 -.2796 377.090 -.2735 378.000 -.2774 379,000 -.2790 380.000 -.2760 381.000 -.2756 -.231 BETA ( 2) = .009 BASE 1.000 TAP NO 369.000 -.2124 379.999 -.2421 371.000 -.2750 372.000 -.2443 373.000 .0000 374,999 -.2511 375,000 -,2440

MILTANO SANTE

DATE 03 444 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1279

## ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF ORB BASE

(REUG34)

SECTION ( 1) ORBITER BASE	•	DEPENDENT VARIABLE CF		
ALPHA ( 2) =231 BETA	(2) = (2)	BASE 1.000	•	
		CH TAT		,
		378,0002493		
		379.0002615		
		389.9992547		
		381.9992547	•	
ALPHA ( 2) =218 BETA	(3) = 4.928	BASE 1.000		
		369.0002596	•	$\circ \circ$
•		370.0002822		"지 []
		371.0003117		POOR O
		372.0002662		FOOR QUALITY
		373,000 .0000		2F 7A
		374.0002769		er [-4
	•	375.0002690	•	Q 17
		376,0002745		PAGE
		377,0002802		<u></u>
		378.0002799		日日
•		379.0002881		7 55 12 155
		380.0002922		.4 02
		391.0002836		
ALPHA ( 3) = 3.930 BETA	(1) = .003	BASE 1.000		•
		TAF NO		
		369.0002254		
		370.0002615		
		371.0002878		
•		372.9992554	•	
		373.999 .9999		
		374.0002641		
		375.0002595		
		376,0002595		
•		377.9992694		
		378.0002638		
		379.0002719		
		380.0002703		
<b>-</b>		381.0002558	•	

.900

ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM DRB BASE (REUG35) ( 04 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

2.000

.000 MACH =

ELY-18 = RUDDER = GIMBAL =

	דגי או פפפכ	
LREF = 1290.3000 IN. YMP = $.0$	זא. אז פפפנ	
	DDDD IN. ZT	
SCALE = ,D2DD		
SECTION ( 1) ORBITTER BASE	DEPENDENT VA	RIABLE OF
ALPHA ( 1) = -4.300 BETA ( 1) = .009	BASE	1.000
	TAP NO	
	369.000	4119
	379,999	4000
	371,000	4242
•	372.000	4699
•	373.000	.0000
	374,999	4182
	375.000	- 4292
	376.000	4118
	377.000	4284
	378.990	4181
	379.000	3689
	380.000	4959
	381,000	4175
	331.133	41/3
ALFHA ( 2) =390 BETA ( 1) = -4.000	BASE	1.000
	CM FAT	21000
	369.000	4782
	379,999	4355
	371.000	-, 4725
	372.999	4875
	373,999	במממ.
	374.999	4597
	375.999	4758
	376.999	4559
	377.000	4766
•	378,000	4664
	379,000	4283
•	389,999	4446
	381.000	4716
		******
LFHA ( 2) =384 BETA ( 2) = .012	BASE	1,999
	TAP NO	
	369.000	4146
	379.990	3975
	371.000	4246
	372,000	4569
	373 .999	.0000
	374,999	4097
•	375.000	4274
	376,999	4934
	377.999	4279
		17-12

DATE OS HAY 75

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## ARC11-014TA19 OTS+STRUT SRB-NON MES-NON ORB BASE

(REUG35)

	· •-·
SECTION ( 1) CREITER BASE	DEPENDENT VARIABLE CI
ALPHA ( 2) =304 BETA ( 2) = .0	12 BASE 1.000
· · · · · · · · · · · · · · · · · · ·	CN PAT
	378,000 -,4085
	379.0003675
	380,0003829
	381,000 -,3907
	2011222 -13931
ALFHA ( 2) =34\$ BETA ( 3) = 4.00	CCC.1 32AB CS CO CO GAT
•	369.0004364
	370.0004235
•	371,0004609
	372.000 -,4586
	373,999 ,9999
	374.0004516
	375.0004599
	376.9994467
	377.0004495
	378.0004403
•	379.0004295
	389.9994378
	381.0004473
ALPHA (3) = 3.903 BETA (1) =00	6 BASE 1.000
•	· TAP NO
	369.9993585
	379.9993518
	371.9993847
	372.9994921
	373,999 ,9999
	374.9903729
	375.0003908
	376.0003763
	377.9993849
•	378.9993715
	379.0003433
	389.9993737
	381.0003792

1.100

ARC11-0141A19 OTS+STRUT SRB-NOW MES-NOW CRB BASE

(REUG36) ( 04 FEB 75 )

### REFERENCE DATA

FARAMETRIC DATA

פפפי

2,000

ELV-IB = RUDDER = GIMBAL =

SREF =	acan I	ספפפ	FT	XMRF	-60	976,0000	TN.	YT		
LREF =		ון בככב		AMSE						
BREF =	1290.	3000 11	١.	ZMQP	=	499.9999	ĭM.	ZΙ		
SCALE =		D <b>SO</b> D								
SECTION	(1)0	RBITER	BASE			DEF	ENDEN	IT VAR	TABLE C	
ALPHA ( :	1) = -	4.99	BETA	(2.5)	= .	.003	BAS	E	1.000	
							TAF	CN		
							369.	999	3912	
							379.	פכפ	4443	
							371.	999	4947	
							372.	990	4756	
	•						373.	222	.0000	
			4				374.	999	~,4573	
							375	200	4649	
								כככ	4715	
							-	200	4821	
							378		- 4608	
							379		4153	
	•		5.4					000	4478	
									4608	
	•						381	נטטי	4000	
AL PLAN C	o\ -	342	BETA	(1)		เกลา	BAS	F	1.000	
ALPHA (	21 -	-, 546	OCIA	(1)		,,,,,,,		CN :		
							369	-	4325	
							370.		4773	
							371		5391	
							372.		-,4992	
							373.		.0000	
			-			•	374		4950	
									5034	
							-	.000		
•							376.		4894	
								בכפ.	5152	
	٠.		• •					.909	4858	
				•				000	5005	
							380.		4784	
							381.	כפפ.	4902	
ALPHA (	21 =	318	BETA	( 2)	=	.012	BAS	E	1,000	
	••							CN =		
							369		3682	
						•	370		4059	
								. מממ	4643	
				•				ככפ	4440	
							373		.0000	
								000	4269	
							•	.000	4345	
								.999	-,4314	
								. מפפ	4451	
							311	LICE	4431	

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FAGE 1283

# ARC11-014TA19 OTS+STRUT SRB-NOM MFS-NOM ORB BASE

(REUG36)

AR	C11-014TA19 OTS	+STRUT S
SECTION ( 1) ORBITTER BASE	DEPENDENT VAR	TABLE CF
LFHA ( 2) =318 BETA ( 2) = .012	BASE TAP NO	1,000
	378.000	4000
•	379.000	4268 3961
	389.999	4117
	381,000	4289
LPHA ( 2) =41 BETA ( 3) = 4.031	BASE TAP NO	1,999
	369.000	-,4605
	379.000 000.000	4798
	371,099	5132
	372.999	4959
•	373.099	ממפת.
	374,000	4924
	375,000	4959
	376.000	4946
	377, 999	5031
	378.999	4999
	379.900	4712
	380.000	4625
	381.000	4929
LPHA ( 3) = 3.717 BETA ( 1) = .000	BASE	1,999
	CN FAT	
	369.000	4175
	379.999	4484
	371.999	5198
	372.000	5008
	373.999	בככם.
	374.000	4782
•	375.000	5001
	376.999	4891
	377.000	4989
	378.999	4786
	379,000	4600
•	389.993	4621

.000

1.250

## ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM ORB BASE

(REUGS7) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

## PARAMETRIC DATA

.000 .000

ELV-IB = RUDDER = GIMBAL =

REF = 2690.0000 %Q.FT. REF = 1290.3000 IN. REF = 1290.3000 IN. SCALE = .0200	YMRF = .	0999 IN. XT 9999 IN. YT 9999 IN. ZT	
SECTION ( 1) ORBITTE BASE		DEPENDENT VA	RIABLE C
ALPHA ( 1) = -4.140 SETA	(1) = .006	BASE	1.900
		TAP NO	
		369.000	2937
		379.909	3562
		371.000	3755
		372.000	3642
		373.999	ם פפפים.
		374.999	3547
•		375.000	3615
		376.000	3649
		377.000	3739
		378.000	3550
		379.000	3137
		380,000	3281
•	•	381.000	3549
ILPHA ( 2) =414 BETA	(1) = -4.003	BASE	1.000
		TAP NO.	
		369.000	-,31.56
		370.000	3650.
		371.000	-, 4917
•		372,000	3848
		373,000	.0000
		374,999	-,3748
		375.000	3856
		376,000	3655
•		377,000	
		378,000	3634
		379,000	3713
	•	380.000	3476
- 1		381.990	3597
LPHA ( 2) =459 BETA	(2) z .009	BASE	1.000
	•	TAP NO	. *
•		369,000	2947
		370.000	3419
		371,000	3903
		372,000	3752
		373.000	מפספ
	•	374.000	3531
		375,999	-,3613
		376,000	3539
		377,000	-,3722
		arr iuuu	-13,55

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DATE OS HAY 75

379.000 -.3511 380.000 -.3492

-.3566

381.000

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### 32AB BRO MCH-27M MCH-BRO

(REUGS7)

	ARC11-014TA19 OFS+STRUT SR
SECTION ( 11 ORBITER BASE	DEPENDENT VARIABLE CP
LPHA ( 2) =459 BETA ( 2) =	.000.1 38A8 eeg.
	378.0003522
	379.0003155
	380.0003308
•	381.9993594
LEPHA (2) =468 BETA (3) = 4	000.1 32AB 820. CM FAT
	369.0003447
	370.0003626
•	371.0003837
	372.0003895
	273.000 .0000
	374.0003728
	375.0003778
	376.9093777
	377,999 - 3824
	378.0003721
	379.0003435
	389.9993544
	381,0003644
MEPHA ( 3) = 3.864 BETA ( 1) =	.003 BASE 1.000
	CN TAP
	369.0003198
	370.0003495
	371.0003943
	372.0003980
	373.999 .9999
	374.0003802
	375.0003951
	376,9993693
	277 000 _ 304

.000

1.400

## ARC11-0147A19 OTS+STRUT SRB-NOW MPS-NOW ORB BASE

(REUG38) ( 04 FEB 75 )

#### REFERENCE DATA

### PARAMETRIC DATA

2.000

= 80-V\_B ccc.

.000 HACH =

ELV-IB =

RUDDER = GIMBAL =

LREF	=	1299	.0000 .3000 .3000 .0000		XMRP YMRP ZMRP	=	976.9999 .9999 499.9999	IN. YT	• .	
SECT	ION	(1)	ORBITS	R BASE			DEPE	ENDENT VA	riablé (p	
ALPHA	( 1	1) =	-4.155	BETA	( 1) =	: .:	203	BASE	1.999	
								TAP NO		
								369.000	2082	
								379.999		
								371,999	2681	
						•	• .	372.993	2836	
								373.999	.0000	
								374.999	2799	
								375.000	2785	
								376.000	2650	
								377.000	2836	
								378.000	2678	
								379.999 389.999	2376	
								381.000	2487 2633	
								351.003	2033	
ALPHA	( 2	) =	387	BETA	(1) =	-4.0	מפו	BASE	1.000	
					• • • •		7	TAF NO	1.000	
								369.000	2272	
					•			370.000	2592	
								371.000	3026	
								372.999	2/57	
								373 ,000	.0000	
								374.999	2713	
								375.000	2761	
								376.000	2794	
								377.000	-,2378	
								378.000	2735	
								379.000	2588	
								380.000	2586	
							3	381.000	2496	
ALPHA	( 2)	=	315	BETA	( 2) =	.0!	19	BASE	1,999	
								TAP NO		
							3	69.000	2125	
								20.000	2582	
					•	•		71.000	2772	
	*							72.999	2939	
							3	73.000	ממפם.	
-								74.000	2667	
			•				3	75.000	2799	
								76.000	2613	
							3	77.000	2771	

. .

#### ARC11-0141A19 OTS+STRUT SRB-NON MFS-NOM ORB BASE

(REUG38)

SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CF

ALFHA ( 2) = -318 BETA ( 2) = .009 BASE 1.000

TAP NO 378.000 -.2610

379.000 -.2416

380.000 -.2452
381.000 -.2574

ALPHA (2) = -.354 BETA (3) = 4.931 BASE 1.000 TAP NO

369.000 -.2480 370.000 -.2689 371.000 -.2942 372.000 -.3005 373.000 -.2808 375.000 -.2850 376.000 -.2850

377.000 -.2810 377.000 -.2856 378.000 -.2745 379.000 -.2499 380.000 -.2648

381.000 -.2694

ALPHA ( 3) = 3.939 BETA ( 1) = .000

BASE 1.000 TAF NO 369.000 -.2340 370.000 -.2904 371.000 -.2906 372.000 -.2944 373.000 .0000

374.000 -.2695 375.000 -.2921 376.000 -.2654 377.000 -.2864

378.000 -.2621 379.000 -.2482

389.990 -.2463

381.000 -.2607

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**FAGE 1288** 

ARC11-014TA19 OTS

SRB-OFF MFS-OFF ORB BASE

(REUG39) ( D4 FEB 75 )

#### REFERENCE DATA

```
SREF = 2690.0000 $0.FT. XMRP = 976.0000 IN. XT
                        TY .NI CCCC. = TRMY
LREF = 1290,3000 IN.
                        THRE = 400.0000 IN. 2T
BREF = 1290.3000 IN.
            .9293
SCALE =
```

ELV-IB = RUDDER = GIMBAL =

.000 פפפ. בפפ. MACH =

1.000

PARAMETRIC DATA

SECTION ( 1) ORBITER BASE

DEPENDENT VARIABLE OF

```
ALPHA ( 1) = -8.139 BETA ( 1) = .099
                                           BASE
                                                   1.000
                                           TAF NO
                                                   -.2471
                                           369,999
                                           370.000 -.2384
                                           371.000 -.2487
                                           372.000 -.2456
                                           373.000 -.2247
                                           374.000 -.2468
                                           375,000
                                                   -.2480
                                           376.000 -.2506
                                           377,000
                                                   -.2495
                                                    . 2000
                                           378.999
                                                    -.2698
                                           379.000
                                           389,999
                                                    -.2495
                                                    בככם.
                                           381.000
                                                    1.000
                                            BASE
ALFHA ( 2) = -4.932 BETA ( 1) = .999
                                           TAF NO
                                           369.000 -.2217
                                           379.500 -.2118
                                                   -.2233
                                           371.000
                                           372.000 -.2253
                                                   -.2080
                                           373.999
                                           374.000
                                                    -.2275
                                           375.999
                                                    -.2198
                                           376.000 -.2277
                                           377.990 -.2273
                                                    פככפ.
                                           378,000
                                           379,000
                                                   -.2271
                                           380.000
                                                   -.2335
                                           381.000
                                                     .0000
```

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ALFHA ( 3) = -.228 .BETA ( 1) = -4.003

BASE 1,000 TAP NO 369.000 -.2329 -.2157 379.993 371.000 -.2148 372.000 -:2214 373 .000 -.2110 374,000 -.2259 375.000 -.2212 -.2232 376.999 377.000 -.2198

ARC11-0141A19 OTS SRB-OFF MPS-OFF ORB BASE SECTION ( 1) DRBITER BASE DEPENDENT VARIABLE CO ALPHA ( 3) x -.225 BETA ( 1) = -4.003 BASE 1,000 CH SAT 378,000 בכפם. 379.000 -.2349 390.000 -.2292 381,999 .0000 ALPHA ( 3) = -.249 SETA ( 2) = BASE 1.000 TAP NO 369.000 -.2978 370.000 -.2008 371.000 -.2036 372.000 -.2054 373.000 -.1838 374.000 -.2082 375.000 -.2010 376.000 -.2098 377.000 -.2939 378.000 .0000 379.000 -.2166 389.999 -.2196 381.000 . 9999 ALPHA ( 3) = -.261 BETA ( 3) = 4.028 BASE 1.000 TAP NO 369.000 -.2310 379,999 -.2151 371.999 -.2177 372,999 -.2129 373.000 -.2127 374.000 -.2247 375.999 -.2229 376.999 -.2247 377.999 -.2231 378,999 .0000 379.000 -.2348 380.000 -.2326 381.000 .0000 - ALPHA ( 4) = 4,032 BETA ( 1) = .003 BASE 1.000 TAP NO 369 .000 -.2027 370,000 -.2003 371.000 -.1990 372,000 -.2061 373,000 -.1926

374,000

-.2196

(REUG39)

ARC11-014TA19 OTS SRB-OFF WIS-OFF ORB BASE

(REUGS9)

SECTION ( 1) GRETTER BASE

DEPENDENT VARIABLE CP

LPHA	t.	4)	2	4,032	BETA	( 1) =	.003	BASE .	1.000	
				1				375.000	2049	
									-	
					*			376.000	2083	
								377,000	2083	
								378,000	. 0000	
								379.000	2189	
								380.000	2189	
								391 .999	.0000	
ALPHA	·	5)	=	7.920	BETA	(1) =	.993	SASS	1.000	
-	Ċ					•		TAP NO		
								369.000	2186	
				* *				379,000	2074	
. •					*			371.000	2072	
								372.999	2052	
								373.000	1909	
								374.000	2137	
								375.000	2129	
									2129	
								376.999		
								377,000	2083	
								378.999	.0000	
								379.000	2261	
								380.000	2286	
								381,000	10000	

```
DATE DS MAY 75
```

TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

PAGE 1291

(3)

ARC11-014TA19 OTS REFERENCE DATA XMRF = 976,0000 IN. XT YMRF = TY WI CCCC.

(REUG40) ( 04 FEB 75 )

## FARAMETRIC DATA

.ooo .000 ELV-OB = SREF = 2590.0000 SQ.FT. ELV-IB = RUDDER = ממת. MACH = 1,100 LREF = 1290.3000 IN. GIMBAL = BREF = 1290,3000 IN. ZMRP = 400.0000 IN. ZT 1.000 SCALE = ממבמ.

SECTION ( 1) ORBITER BASE

DEPENDENT VARIABLE CP

ALPHA (1) = -7.992 BETA (1) = .003 BASE 1,000 TAP NO 369,999 -.3969 370,000 -.3288 -.3319 371,990 372.000 -.3285 373,999 -.2990 374.000 ~.3293 375.000 -.3292 376,000 -.3222 377.000 -.3201 378.000 379.000

בכככ. -.3295 380.000 -.3278 381.000 .0000

ALPHA ( 2) = -4.080 BETA ( 1) = .003

BASE 1,000 TAP NO 369.000 -.3227 370.000 -. 3264 - . 3327 371.999 372.999 -.3323 373.999 -.3956 374,999 -.3286 375.999 -.3261 376.000 -.3285 377.000 -.3237 378.999 פפפפ. 379.999 -.3330 389.999 -.3319 381,000 בככב.

ALPHA ( 3) = -.225 BETA ( 1) = -4.000

TAP NO 369.000 -.3792 370.000 -.3773 371.999 -.3661 372,999 -.3627 373.000 -.3475 374,000 -.3729 375.000 -.3799 375,000 -.3724 377,999 -.3570

BASE

1.000

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SRB-OFF MPS-OFF ORB BASE

ARC11-0141A19 OTS

SRB-OFF MIS-OFF ORB BASE

(REUG49)

DEPENDENT VARIABLE CP . SECTION ( 1) CROTTER BASE ALFHA ( 3) = -.229 BETA ( 1) = -4.900 BASE 1.000 TAP NO 378.000 ממממ, 379.000 -.3758 380.000 -.3712 381,000 מככת. ALFHA ( 3) = -.159 BETA ( 2) = .012 BASE 1,000 TAP NO 369.000 -.3317 370.000 -.3272 371,999 -.3338 372.000 -.3339 373,999 -.3021 374.000 -.3312 375.990 -,3272 376,000 -.3333 377,999 -.3391 378.999 מככם. 379.000 -.3358 389,999 -.3342 381,000 .0000 ALFHA ( 3) = -.312 6@TA ( 3) = 4.028 BASE 1.000 TAP NO 369,000 -.3535 379,999 -.3448 371.000 -.3543 372.000 -.3319 373.999 -.3496 374,000 -.3414 375.999 -.3461 376.000 -.3519 377.999 -.3502 378.500 .0000 379,000 -.3513 380.000 -.3596 361.000 .0000 ALPHA ( 4) = 3.885 BETA ( 1) = .000 BASE 1.999 TAP NO 369.000 -.3732 370,000 -.3666 371.000 -.3739 372.999 -.3797 373.999 -.3465 374.000 -.3724

FAGE 1293

ARC11-0141A19 OTS

SEB-OFF MIS-OFF ORB BASE

(REUG49)

SECTION ( 1) ORBITER	BASE	DEPENDENT VARIABLE CF .	
ALPHA ( 4) = 3.883	BETA (1) = .500	BASE 1.900 TAP NO	
		375.0003705	
		376.9993724	
		377.0003672	
		378.000 .0009	
		379,0003767	4
•		389.9993714	~ Ó.
		381.000 .0000	F. 69
ALPHA ( 5) = 8.079	BETA (1) = .000	BASE 1.000 TAP NO	ORIGINAL PAGE I
		369.0004240	
		370.0004150	2
		371,0004162	$\mathbb{Z}_{\Delta}$
		372.0004126	20
		373.0003954	月田
		374.0004199	₹ 🛪
		375.0004209	
		376.0004199	
		377.0004207	
		378.000, 0000	
		379.0004276	
		380.0004239	
	•	381.000 .0000	

ARC11-0141A19 DTS SEB-OFF MES-OFF ORB BASE

(REUG41) ( D4 FEB 75 )

= 80-VJE 000.

### REFERENCE DATA

SAEE = 2690,0000 SQ.FT. XMRF = 976,0000 IN. XT LREF = 1290.3000 IN. TY - NI 0000, = 39HY ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

RUDDER = GIMBAL =

E V-18 =

.000 MACH = 1,000

FARAMETRIC DATA

SCALE = .9299

## SECTION ( 1) CABITER BASE

### DEPENDENT VARIABLE CP

ALPHA (1) = -8.232 BETA (1) = -.906TAP NO 369.000 -.2512 370.000 -.2988 371.000 -.3021 372.000 -.2738 373.000 -.2611 374.000 -.2954 375.000 -.2895 376.000 -.2889 377.000 -.2876 378,000 .0000 379.900 -.3993 380.000 -.2990 381,000 כמכים. 1.999 BASE

ALFHA (2) = -4.090 BETA (1) = -.006

TAP NO 369.000 -.2626 370.000 -.2879

371.000 -.2903 372.000 -.2790 373.000 -.2674 374.000 -.2874 375.990 -.2831

376.000 -.2833 377,999 -.2894 .0000 378 .000

379,000 -.2898 380.000 -.2890 .0000 381.000

ALPHA (3) = -.243 BETÁ (1) = -4.999

BASE TAP NO

369.000 -.3157 370.000 -.3152

371.000 -.3130 372.000 -.3042

373.000 -.2983

374,593 -.3119 375.999 -.3117

375.000 -.3132

377,000 -.3060

DATE 03 444 75

# TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

(REUG41)

	ARC11-9141A19 OTS	SRB-OFF MPS-O	FF ORB BASE
SECTION ( 1) ORBITER BASE	DEPENDENT VARI	ABLE CF	
ALPHA ( 3) =243 BETA ( 1) = -4.00	D BASE	1.099	
	TAP NO	*****	
	378,020	מספם.	
		3172	
		3133	•
	381,000	.9000	
ALPHA ( 3) =171 BETA ( 2) = .01	2 SASE	1.000	•
•	CM PAT		_
	369.000	2839	\$.0
	370.999 -	2852	्र हर
	371,000 -	2927	. ટ્રજે
	372.000 -	2868	` 88
	373.999 -	2635	## F
	374.000 -	2884	5 17
	375.000 -	2841	$\widetilde{c}$
	376.000 -	2886	ORIGINAL PAGE IS OF POOR QUALITY
	377.000 -	2849	E &
•	378.999	.0000	H G
	379,000 -	.2918	M K
	380,000 -	2903	<b>U</b> 2
	381,000	.0000	
ALPHA (3) =171 BETA (3) = 4.02	BASE 1	.000	
	369.000 -	. 3093	
	<b>37</b> 9.999 ~	.3135	
•		.3167	•
	372.999 -	.2969	
		.3049	
		.3198	
		.3093	
		.3119	
		.3090	
		.0000	
		.3166	
		.3150	
		.0000 .	•
LPHA ( 4) = 7.860 BETA ( 1) =993		.000	
	CM TAT		
		.3422	•
		.3500	
e e e e e e e e e e e e e e e e e e e		.3495	
	372,000 -,	.3439	

372.000 -.3430 373.000 -.3187 374.000 -.3521

PAGE 1298

ARCII-DIATAIS OTS

SRB-OFF MES-OFF ORB BASE

(REUG41)

SECTION ( 1) ORBITER BASE

DEPENDENT VARIABLE CO

ALPHA ( 4) = 7.860 BETA ( 1) = -.003

9ASE 1.000 TAP NO 375.000 -.3462 376.000 -.9473 377.000 -.3475 378.000 .0000 379.000 -.3558 390.000 -.3521 381.000 .0000

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TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 ) DATE DS HAY 75 ARC11-014TA19 OTS SRB-OFF HFS-OFF ORB BASE (REUG42) ( 04 FEB 75 ) REFERENCE DATA SREF = 2690,0000 SQ.FT. XNRP = 976,0000 IN. XT LREF = 1290,3000 IN. YMRF = .0000 IN. YT BREF = 1290.3000 IN. ZMRF = 499.9999 IN. ZT SCALE = .0200 SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE OF ALPHA (1) = -4.059 BETA (1) = .000 BASE 1.000 TAP NO 369.000 -.2080 379.999 -.2624 371.909 -.2693 372.000 -.2463 373.000 -.2244 374,999 -.2581 375.900 -.2535 376.999 -.2535 377,999 -.2492 378.000 מפפפ . 379.000 -.2606 389.999 -.2564 381.000 .4484 ALPHA (2) = -.185 BETA (1) = -3.997BASE 1.000 TAP NO 369.000 -.2592 379.999 -.2798 371.000 -.2692 372.000 -.2520 373.000 -.2406 374.000 -.2606 375.000 -.2556 376.000 -.2599 377.000 -.2585 378.000 .0000 379.000 -.2685 389.999 -.2657 381.000 .0000 ALPHA (2) = -.195 BETA (2) = .012 BASE 1.000 TAP NO 369.000 -.2147 379.990 -.2516 371.000 -.2514

> 372.000 -.2375 373.999 -.2197 374.000 -.2489 375.000 -.2448 376.000 -,2420 377,000 -.2439

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### PARAMETRIC DATA

EL V- 16 = .000 E\_V-08 = .000 RUDDER = .999 MACH = 1.499

GIMBAL = 1,000 ARC11-014TA19 OTS

SRB-OFF MFS-OFF ORB BASE

(REUG42)

SECTI	Ost (	1)	ORBITER	BASE				DEPENDENT VA	RIABLE CF
ALPHA	( 2)	=	195	BETA	( 5)	=	.012	BASE TAP NO	1.999
								378.000	.0000
								379.000	2523
								380.000	2492
								381,000	.מממם.
ALPHA	( 2)	=	.027	BETA	( 3)	=	4.028	BASE NO	1.000
•								369.000	2516
								370,000	2753
								371,000	2750
								372.000	2485
								373.000	2419
								374.000	2665
• .							•	375.000	2669
								376.000	2637
								377.999	2629
								378.000	.0000
			*, *,					379.000	2742
								380.000	2727
								381,990	. 9999
ALPHA	( 3)	=	3.924	BETA	(1)	=	.993	BASE CN PAT	1.090
								369.000	2295
			•						
								379,999 37: 000	2626 - 2515
		٠.						371 .000	2515
		•						371,000 372,000	2515 2425
•		•						371.000 372.000 373.000	2515 2425 2289
								371.999 372.999 373.999 374.990	2615 2426 2289 2587
								371,000 372,000 373,000 374,000 375,000	2615 2426 2289 2587 2551
					• • • • • • • • • • • • • • • • • • •			371,000 372,000 373,000 374,000 375,000 376,000	2615 2426 2289 2587 2551
								371.000 372.000 373.000 374.000 375.000 376.000 377.000	2615 2426 2289 2587 2551 2551
					•			371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000	2615 2426 2289 2587 2551 2551 2556
								371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 379.000	2615 2426 2289 2587 2551 2551 2556 .0000 2640
					•			371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 379.000 389.000	2615 2426 2289 2587 2551 2551 2556 0000 2640 2592
								371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 379.000	2615 2426 2289 2587 2551 2551 2556 .0000 2640
<b>ALPHA</b>	( 4)		7.809	BETA	(3)	· · · · · · · · · · · · · · · · · · ·	.003	371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 379.000 380.000	2615 2426 2289 2587 2551 2551 2556 0000 2640 2592
ALPHA	( 4)		7,809	ВЕТА	( 1)		.993	371.000 372.000 373.000 374.000 375.000 376.000 377.000 379.000 379.000 380.000 381.000	2615 2426 2289 2587 2551 2551 2556 0000 2640 2592 0000
ALFHA	( 4)		7.809	ВЕТА	(1)		.993	371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 379.000 380.000 381.000 BASE TAP NO	2615 2426 2289 2587 2551 2551 2556 0000 2640 2592 0000
<b>ALFHA</b>	( 4)		7.809	BETA	(1)		.003	371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 379.000 380.000 381.000 BASE TAP NO 369.000	2615 2426 2289 2587 2551 2551 2556 .0000 2640 2592 .0000 1.000
<b>ALPHA</b>	( 4)		7.809	BETA	(1)		.993	371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 389.000 381.000 BASE TAP NO 369.000 370.000	2615 2426 2289 2587 2551 2551 2556 .0000 2640 2592 .0000 1.000 2626 2758 2758
<b>ALPHA</b>	( 4)		7.809	BETA	(1)		.993	371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 389.000 381.000 8ASE TAP NO 369.000 371.000 371.000	2615 2426 2289 2587 2551 2551 2556 .0000 2640 2692 .0000 1.000 2626 2758 2763 2636
<b>ALPHA</b>	( 4)		7.809	BETA	( 1)		.993	371.000 372.000 373.000 374.000 375.000 376.000 377.000 378.000 389.000 381.000 BASE TAP NO 369.000 370.000	2615 2426 2289 2587 2551 2551 2556 .0000 2640 2592 .0000 1.000 2626 2758 2758

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TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1299

ARC11-0141A19 OTS SRB-OFF NPS-OFF ORB BASE

(REUG42)

SECTION ( 1) ORBITER BASE

DEPENDENT VARIABLE CP

381,000

ALPHA ( 4) = 7.809 BETA ( 1) = .003 BASE TAP NO 375.000 -.2699 376.000 -.2704 377.000 -.2685 378.000 , פפפפ 379.000 -.2772 380.000 -.2755

ELV-OB =

MACH =

PARAMETRIC DATA

מכם.

1.000

ELV-IB =

RUDDER =

GIMBAL =

### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290.3000 IN. YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT BREF = 1290,3000 IN.

SCALE = . .0200

377,000 -.2323

SECTION ( 1) DRBITER BASE DEPENDENT VARIABLE CP ALPHA ( 1) = -8.13\$ SETA ( 1) = .003 BASE TAP NO 369,000 -.2746 370.000 -.2670 371.000 -.2773 372.000 -.2769 373,000 -.2550 374.000 -.2839 375.000 -.2799 376.909 -.2852 377.000 -.2758 378,000 .0000 379,000 -.2851 380.000 -.2856 פפפת. 381,000 BASE 1,000 ALPHA ( 2) = -4.992 BETA ( 1) = .993 TAP NO 369,000 -.2369 370.000 -.2255 371.999 -.2433 372,000 -.2449 373.000 -.2194 374.000 -.2449 375.000 -.2401 376.000 -.2434 377.000 -.2436 378.000 .0000 379.000 -.2438 380.000 -.2407 381.999 פפפפ. BASE 1.999 ALPHA (3) = -.342 BETA (1) = -4.999TAP NO 369,000 -.2413 370.000 -:2294 371.000 -.2235 372 .000 -.2331 373.000 -.2241 374.000 -.2366 375,000 -,2350 -.2366 376,000

PAGE 1301

(REUG43)

	ARCS	1-9141A19 OTS	\$	SRB-NOM	MPS-OFF	ORB BASE	•
SECTION ( 1) ORBITER BASE	· .	DEPENDENT VA	RIABLE C	•	÷ .		
ALPHA ( 3) = +.34# BETA ( 1)	= -4.000	BASE CA PAT	1,000				
		378.000	ממפפ,				
		379.000	2451				
		380.000	2458				
		381,000	.0000				
ALPHA ( 3) =357 BETA ( 2)	210.	BASE CN GAT	1.000	•	•		
		369.000	2207				
		370.000	2197				
		371,000	2232				
		372.999	2184				
		373.000	2083				
		374.000	2331				6
e		375.000	2269				'n
		376.000	2266			+ - 1	1
		377,999	2236			9	Ŝ
		378,000	.0000			Ş	1
		379.000	2326			•	٠
		380.000	2316			. E	2
		391.000	,0000		-	4	7
ALPHA ( 3) = '288 BETA ( 3) :	4 .922	BASE	1.000			XITHOS SOLL	7
		CM PAT				K	3
		369.000	2493			- '	1
		370.909	2201				
		371.993	2370				
		372.000	2463				
		373,000	2265				
		374.000	2412	•			
		375.000	2333				
		376.000	2363	•			
		377,000	2313				
· · · · · · · · · · · · · · · · · · ·		378.000 379.000	.0000				
et a series de la companya de la companya de la companya de la companya de la companya de la companya de la co		380.000	2417				
		381.000	.0000				
		301,030	,5555				
ALPHA ( 4) = 3.924 BETA ( 1) =	000	BASE	1.000				
:		CA TAT					
		369.000	2174		*	*	
		370.000	-,2954				
		371.000	2074		•		
		372.000	2097		•		
	•	373.000	-,1857				
	• .	374.000	2110				

OF POOR QUALITY

(REUG43)

ARC11-014TA19 OTS

SRB-NOM MPS-OFF ORB BASE

SECTION ( 1) ORBITTE BASE

DEPENDENT VARIABLE CP

SECTION ( 1) ORBITIES BYSE	DELEGIENT ANGTABLE C
ALFHA ( 4) = 3.924 BETA ( 1) = .0	900 BASE 1.999
	CA PAT
	375.9992128
	376.000 ~.2104
	377.0002076
	278,000 0000
	379.0002234
	390.0002179
	381.000 .0000
ALPHA ( 5) = 7.962 BETA ( 1) = .5	9ASE 1.000
	369.0002157
	370.0002049
e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	371.0002021
	372.0002064
	373.0001883
	374.0002144
	375.9002129
	376.9992129
	377,9992984
	378,000 .0000
	379.0002158
	389,9992116
	381,000 ,0000

373.999 -.3426 374.999 -.3552 375.999 -.3512 376.999 -.3592 377.999 -.3525 FARAMETRIC DATA

1.000

= 80-V13 000.

.000 HACH =

ELV-18 =

RUDDER =

GIMBAL =

ARC11-014TA19 OTS SRB-NOW MES-OFF ORB BASE REFERÊNCE DATA SREF = 2690.0000 \$0.FT. XMRP = 976.0000 IN. XT LREF = 1290.3000 N. YMRP = .0000 IN. YT BREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT SCALE = .0200 DEPENDENT VARIABLE CP SECTION ( 1) ORBITER BASE ALPHA ( 1) = -8.106 BETA ( 1) = .000. BASE TAP NO 369.909 -.2858 370.000 -.2914 371.000 -.2982 372.000 -.2963 373.900 -.2749 374.000 -.2941 375.000 -.2878 376.000 -.2935 377.000 -.2886 378,000 בככם. 379.000 -.2960 380.000 -.2980 381.000 ,0000 ALPHA (2) = -4.938 BETA (1) = .999 BASE 1.000 TAF NO 369 .000 -.3053 379.999 -.3992 371.000 -.3084 372.990 -.3111 373.000 -.2920 374.000 -.3092 -,3058 375.000 376.999 -.3999 377.999 -.3977 378.000 .0000 379.000 -.3067 389.000 -.3116 381.000 .0000 BASE 1.000 ALPHA (3) = -.363 BETA (1) = -4.003CH PAT 369.000 -.3648 370.000 -.3553 371.000 -.3491 372,999 -.3599

(REUG44) ( 04 FEB 75 )

.999

1,199

ARC11-014TA19 OTS

SRB-NOM MES-OFF ORB BASE

(REUG44)

SECTION ( 1) ORBITER BASE				DEPENDENT V	ARTABLE CO
ALPHA ( 3) =363 BETA	(1)	=	-4.003	BASE	1.000
				CM PAT	
and the second of the second o				378.999	.0000
				379.000	3590
				380,000	~.3554
				381.000	.0999
ALPHA ( 3) =363 BETA	(2)	=	.912	BASE	1.000
				TAP NO	
				369,000	3298
•				370.000	3075
				371.000	
				372.099	
				373 .999	
				374.000	
and the second second				375.000	
				376.090	
•				377.000	
				378.000	
				379.000	
				380.000	
				381.000	
ALFHA ( 3) =39\$ BETA	( 3)	=	4.022	BASE	1.000
				TAP NO	į
				369.000	3371
				370.000	3242
				371,000	3302
				372 .900	3218
				373.999	3219
				374.000	3278
				375.000	3289
				376,999	3321
				377,000	
				378.990	
				379.000	- ,
				380.000	
				381 .999	
ALPHA (-4) = 3.888 BETA (	(1)	_	.999	BASE	1.990
THE TAX TO STORY SELLY	• • •	-	9 20 20	TAP NO	
				369.000	
				379,000	
				371.000	
	•				
				372,000	
				373.999	
				374.990	-,3694

ATE 03 MAY 75	TABULATED SOUR	CE PRESSURE DATA		*		
	ARC	11-0141A19 OTS	SRB-N	ON NES-OFF (	OFB BASE	(REU644)
SECTION (1) ORBITER BASE		DEPENDENT VARIA	BLE CP			
ALPHA ( 4) = 3.888 BETA	000, = (1)	BASE 1	.000			•
		375.000 -	.3662			
•		376.000 -	.3733			
en en en en en en en en en en en en en e		377.000 -	.3699			
		378.000	,ספפפ			_
			.3745	• *	•	
		380.000 -	.3742			
•		381.000	.0000			
ALPHA ( 5) = 7.977 BETA	(1) = .000	BASE 1	בכני.			
	•	CM PAT				
			3959			
			3842		<b>₽</b>	
			3974			
•			4052		<b>2</b> E	•
in the second second second second second second second second second second second second second second second			3845		8 ₹	
			-,4000		ORĮGINAL JF <b>PO</b> OR	
			3971			
			4057		بر م	
		377 .000	3982 -		IGINAL PAG	
		378.000	כמממ.		[T 42	
			-,4028		KLI. Si a	
•		380.000	4015		S K	
		381,999	. 2222		02	

FAGE 1305

ARC11-014TA19 OTS

SRB-NOM MES-OFF ORB BASE

(REUG45) ( 94 FEB 75 )

### REFERENCE DATA

SREF = 2690,0000 50.FT. XMRP = 976,0000 IN. XT LREF = 1290,3000 IN. YMEP = TY .NI 2000. SREF = 1290.3000 TN. 2MRP = 400.0000 IN. ZT SCALE = .0200

PARAMETRIC DATA

.000 ELV-IB = .000 D.V-08 = RUDDER = .000 MACH = 1.250 GIMBAL = 1.000

SECTION ( 1) ORBITER BASE DEFENDENT VARIABLE CF ALPHA ( 1) = -8.244 BETA ( 1) = -.909BASE TAP NO 369.000 -.2193 379,000 -.2369 371.000 -.2394 372.000 -.2291 373.000 -.2138 374,000 -.2376 -.2314 375.000 376.999 -.2322 377,000 -.2288 378.990 .0000 379.999 -.2375 389,999 -.2375 .0090 381.000 BASE ALPHA (2) = -3.936 BETA. (1) = -.009TAP NO 369.000 -.2328 379,000 -.2312 -, 2363 371.990 372.000 -.2400 -.2249 373,000. -.2361 374,000 375.000 -.2329 375.000 -.2353 377.000 -. 2320 378.000 . 2223 -.2357 379.000 -.2392 389,990 391.000 ממפת. ALPHA ( 3) = -.309 BETA ( 1) = -4.009BASE 1,7000 TAP NO 369.000 -.2589 379,999 -,2507 371.000 -.2467 372.000 -.2400 -.2432 373,999 374.000 -.2499 375,999 -.2457 -.2516 375.000 377.000 -.2492

ARC11-0147A19 OTS SRB-NOW MES-OFF ORB BASE SECTION ( 1) ORBITÉR BASE DEPENDENT VARIABLE CF ALPHA ( 3) = -.309 BETA ( 1) = -4.000 BASE 1.000 CH TAT 378.000 בכפב. 379,000 -.2529 380.000 -.2513 381.000 פפפפ. ALPHA (3) = -.365 BETA (2) = .009 BASE 1,000 CH PAT 369.993 -.2375 370,000 -.2228 371.000 .-.2379 372.999 -.2491 373.999 -.2232 374,000 -.2348 375,000 -.2327 -.2371 376.000 377.000 -.2347 378.000 .0000 379.000 -.2375 380,000 -.2398 381.000 .0000 BASE 1.000 ALPHA (3) = -.405 BETA (3) = 4.025CH TAT 369.000 -.2529 -.2462 370,999 371.000 -.2478 -.2446 372,999 373.999 -.2293 374.000 -.2469 375.999 -.2442 376.999 -.2499 377 .999 ~.2470 מכפפ. 378,000 -.2558 379.000 380.000 -.2514 381.000 פפפפ. 1.000 ALPHA ( 4) = 3.873 BETA ( 1) = .500 BASE TAP NO 369.990 -.2530 370.000 -.2442 371,000 -.2539 372.000 -.2653 -.2498 373.000

374.000 -.2557

(REUG45)

372,000 -.2909 -.2692

375.000 -.2835 376.000 -.2889 377.000 -,2859 378,000

-.2889

.0000 -.2934

-.2892

.0000

373.000 374.000

379.000

381.000

389.999

SRB-NOW MPS-OFF ORB BASE

(REUG45)

ARC11-0141A19 OTS DEPENDENT VARIABLE CP SECTION ( 1) ORBITER BASE ALPHA ( 4) = 3.873 BETA ( 1) = .000 BASE TAP NO 375.000 -.2528 376.000 -.2569 377,000 בכככ . 378.000 -.2619 379.000 -.2592 380,000 381 .000 1.000 BASE ALPHA ( 5) = 7.989 BETA ( 1) = .000 TAP NO -.2846 369.000 -.2782 370.000 -.2842 371 .000

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PAGE 1309
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1.400

376.000 -.1858 377.999 -.1965

ARCII-DI4IAID OTS SEB-NON NES-OFF ORB BASE

(REUG46) ( D4 FEB 75 )

### REFERENCE DATA

# PARAMETRIC DATA

ELV-IB = RUDDER =

GIMBAL = 1.000

= 80-VJ3 000.

.000 MACH =

					• • •					
SREF	=	2699	פ פפפפ. פ	9.FT.	XMRP	=	976.00	ooo IN. XT		
			1.3000 i		YMEF			OOD IN. YT		
BREF	=	1299	ו מפפנ.נ	IN.	ZMRP	=	400.00	OOO IN. ZT		
SCALE	=		.9299							
SECTI	Ю	(1)	CRETTER	BASE				DEPENDENT VA	RIABLE CP	
ALPHA	( 1	1) =	-8.175	BETA	(1) =	:	.003	BASE	1,999	
								TAP NO		
								369.000	1598	
								379.999	1794	
								371.999	1811	
								372.999	1711	
								373.000	1521	
								374.000	1783	
•				•				375.000	1773	
								376.000	1758	
			4					377.000	1744	
•								378,000	.9999	
								379.000	1763	
								389.999	1758	
								381.000	מפפם.	
ALPHA	( )	2) =	-4,002	BETA	(1) =	:	.003	BASE	1.000	
								CN TAT		
								369.000	1712	
•								379.500	1817	
								371.000	1837	
					•			372.000	1825	
								373.000	1669	
							•	374.999	1848	
								375.000	1784	
								376,000	1894	
								377.000	1792	
								378.999	.0000	
								379 .000	1814	
								389,999	1814	
					1.		•	381.990	.0000	•
ALPHA	( 3	)) ±	348	BETA	(1) =	-4	.999	BASE	1.000	
					•	•		TAP NO	,	
								369.000	1945	
					•			370.000	1996	
								371.000	1883	
								372.000	1542	
				•					1784	
								374,000	1848	
								375.000	1845	
								335 000	***	

ARC11-014TA19 OTS

SRB-NOW MES-OFF ORB BASE

(REUG46)

SECTION ( 1) ORBITER BASE		DEPENDENT VARIABI	LE CE
ALPHA ( 3) =348 BETA (	1) = -4,000	BASE 1.	999 .
•			פכפפ
			1901
			1889
			0000
		391.000	JUJU
ALPHA ( 3) =369 BETA (	2) = .016	BASE 1.9	000
		369.000	1786
		370.000	1751
		371,999	1804
		372.999	1807
		373.000:	1645
			1818
		375.000	1765
		376.000	1794
		377,000	1761
•	•		ממממ
			1834
•			1828
			ממממ
ALPHA ( 3) =360 BETA (	3) = 4.028		999
		TAP NO	
			1933
• •			1996
			1939
			1900
•		373.999	1545
			1895
			1845
		376.900	1861
		377.000	1838
		378.000 .	מממם
		379,000:	1958
		380.000:	1916
		381 .000 .1	9999
ALPHA ( 4) = 3.900 SETA (	1) = .006	BASE 1.	999
		TAP NO	
		369.000:	1881
			1859
			1975
			1997
		373.990:	1729
		374,000:	1972

PAGE 1311

ARC11-D14TA19 OTS

SRB-NOM MFS-OFF ORB BASE

(REUG46)

SECTIO	) AC	1)	ORBITER	BASE				DEPENDENT VAR	STABLE CF		•
ALPHA	( 4)	· =	3,900	BETA	(1)	=	.006	BASE CA TAT	1.000		
						•		375.000	1851		66
		•						376,000	1867		
								377.990	-,1836		
								378.000	.0000		•
								379.000	1898		
								380.000	1898		
	•							381.000	.0000		
ALPHA .	( 5)	=	7.653	BETA	( 1	) =	.006	BASE CA PAT	1.000		ORIGINAL OF POOR
			•					369,000	-,2010		- F
								370,000	1907		# F
								371,990	2034		
			*					372 .000	2138		
								373.000	1955		0.70
								374,000	2041		ZZ
								375.000	2934		PAGE
								376,000	2057		
								377,000	2035		PAGE IS
								378.990	,0000		
•								379.000	2079		
								380,000	2068	*	
			1.					381 .000	.0000		
								-, ·			

PAGE 1312

.000

ARC11-0141A19 OTS

SRB-OFF MS-OFF ORB BASE (REUGAT) ( D4 FEB 75 )

### REFERENCE DATA

SREF = 2690,0000 SQ.FT. XMRF = 976,0000 IN. XT LREF = 1290.3000 IN. YMRF = .0000 IN. YT BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200

ELV-IB = RUDDER = GYMBAL =

# 80-VJ3 000.8 - HOAM CCC. 1.499

PARAMETRIC DATA

1.000

### SECTION ( 1) ORBITER BASE

### DEPENDENT VARIABLE CP

ALPHA (1) = -4.050 BETA (1) = -.003BASE 1,000 TAP NO 369.000 -.2175 379.999 -.2893 371.000 -.2789 373.000 378,000

372.000 -.2632 -.2321 374.000 -.2735 375.000 -.2710 376.000 -.2686 377.000 -.2686 פככפ. 379.000 -.2806 389.999 -.2736 381,000 ,0000

BASE TAP NO

## ALFHA ( 2) = -,150 BETA ( 1) = -4,000

369.000 -.2637 370.000 -.2766 371.999 -.2743 372.000 -.2520 373.000 -.2472 374.000 -.2749 375.000 -.2704 376.000 -.2712 377.000 -.2662 378.999 פכככי. 379.999 -.2771 380.000 -.2745

381,990 ,9999

### ALPHA (2) = -.129 BETA (2) = .009

BASE 1.000 CH PAT 369.000 -.2242 370.000 -.2680 371.000 -.2681 372.999 -.2524 373.000 -.2273 374.000 - -.2641 375.000 -- 2614 376,999 -.2693 377.000 -.2592

ORIGINAL PAGE IS OF POOR QUALITY

ARC11-014TA19 OTS

379.000

389,999

381.000

-.2809

-.2776

.0000

SRB-OFF MIS-OFF ORB BASE

FAGE 1313

SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CP ALPHA ( 2) = -.129 BETA ( 2) = .009 1.000 BASE TAP NO 378.000 ימפפפי. -.2695 379.000 380.000 -.2667 381.000 .ספפם ALPHA (2) = -.234 BETA (3) = 4.028 BASE 1.999 CH TAT 369.000 -.2572 370.000 -.2886 371.000 -.2881 372.999 -.2585 373.000 -.2564 374.000 -.2797 375.000 -.2820 376.000 -.2797 377,000 -.2778 378.000 פפפפ, -.2920 379,000 389.999 -.2825 381.999 מממם. ALPHA (3) = 3.867 BETA (1) = .009BASE 1.000 TAP NO 369.000 -.2353 370.000 -.2796 371.000 -.2891 372.000 -.2544 373.999 -.2417 374,000 --.2753 375.000 -.2742 376.000 -.2722 377,999 -.2689 379.000 בפפפ .

ORIGINAL PACE IS OF FOOR QUALITY

(REUG47)

PAGE 1314

ARC11-014TA19 OTS

SEB-NOW MES-OFF ORB BASE

(REUG48) ( .04 FEB 75 )

### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290.3000 IN. YMRF = .0000 IN. YT ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. SCALE = .0200

נינים, ELV-IB = 8.000 ELV-08 = 1,400 RUDDER = = HOAM CCC. GIMBAL = 1.000

PARAMETRIC DATA

-.1982

-.1956

376.999 -.1935 377.000 -.1932

374.993 375.000

DEPENDENT VARIABLE CF SECTION (.1) ORBITER BASE ALFHA (1) = -4.143 BETA (1) = -.093TAP NO 369,000 -.1806 370.000 -.1980 -.1989 371.999 372.000 -.1941 -.1775 373.000 374.000 -.1986 375,999 -.1956 376,999 -.1972 377.000 -.1933 .0000 378.999 -.2003 379.999 380.000 -.1986 בכככ. 381,000 BASE 1.000 ALPHA (2) = -.243 BETA (1) = -4.003TAP NO 369.900 -.2058 370.000 -.1991 371,000 -.2010 372.990 -.1721 373.999 -.1959 374.999 -.1935 375.000 -.1935 376.000 -.1972 377,000 -.1957 ,0000 378.000 379,000 -.2025 -.2013 380.000 381,000 פממפ. ALPHA ( 2) = -.324 BETA ( 2) = .009 . BASE CH TAT 369.000 -.1917 370.000 -.1934 -.1979 371.990 372.000 -.1937 -.1754 373.000

OF POOR & L PAGE IS

380,999 381,999

.0000

		ARC	11-9141A19 OT	S SRB	-NON MPS-OFF	ORE BASE
SECTION ( 1) ORBITER BAS	E		DEPENDENT VA	RIABLE CP		
ALPHA ( 2) =324 BET	y (5) =	.029	BASE CM TAT	1.000		
			378.999	.0000		
	•		379,000	2018		
• 4			389.099	1990		
			381.000	.0000		C
	• •		301,333	·		
ALPHA ( 2) =435 BET	A (3) =	4.025	BASE CM PAT	1.000		ţ: (
			369.000	2045		
			379.999		•	
•			371.000	2035		
			372,999	1998		
			373.000	1618		
			374.999	1987		
			375.000	1994		
			376.000	1979		
			377.999	1934		
			378,999	,9999		
			379.000	2957		
			390.000	2043		
			381,999	.9999		
ALPHA ( 3) = 4.032 BET/	A (1) =	006	BASE TAP NO	1,999		
			369.000	2953		
			370,000	2931		
			371.999	2968		
	* -		372.999	2037		
			373.999	1791		
			374.000	2015		
			375.000	2026		
			376.999	2009		
			377,000	2934		
			378.000	. 0000		
	•		379,000	2093		

(REUG48)

4,000

.900

### REFERENCE DATA

### SREF = 2690.0000 SQ.FT. XMQP = 976.0000 IN. XT LAEE = 1500.3000 IN. AME = .0000 IN. AL 99EF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT SCALE = .0200

ELV-19 = # 8C-V\_3 000.8 RUDDER = .000 MACH = GIMBAL = 1.000

PARAMETRIC DATA

### CF

SECTION	( 1)ORBITER	BASE				DEPENDENT \	ARTABLE C
ALPHA ( 1)	= -4.041	BETA	(1)	=	. פכפ	BASE	1,999
						TAP NO	)
						369.000	2193
						370.000	2169
						371.999	2217
						372,999	2195
						373.000	2951
						374.000	
						375.000	2250
			2.1			376.990	2246
						377.000	2192
				•		378.000	בספפ.
	•					379 .000	_
						380.000	
						381.000	פספס.
ALFHA ( 2)	=198	BETA	(1)	= -4.	993	BASE	1,000
						TAP NO	
						369,000	2353
						370,000	2150
						371,000	
						372.000	
						373.000	2192
						374.000	2293
						375.999	2263
•						376.900	2241
						פפס, ללונ	2156
						378 .000	.0000
						379.000	
						300,000	2259
						381 .000	. 0000
LPHA ( 2)	=1@	BETA	( 2)	<b>3</b> .!	009	SASS	1.999
						TAP NO	
	٠.					369,000	2172
						370,000	-,2121
						371.000	-,2198
						372.000	2146
						373,000	2081
						374.000	
						375.000	
						375,000	- 2254
						377.000	
	•					2111000	-14123

DATE 03 MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-0141A19 OTS

SRB-OFF NIS-OFF ORB BASE

(REUG49)

SECTION ( 1) ORBITER	BASE			DEPENDENT VA	RIABLE CP	•	
ALPHA ( 2) =162	BETA	(2) =	.009	BASE	1.000		
			•	TAF NO			ř
				378.999	.0000		
				379.000	2295		₽ ~
				380.000	2305		₹ €
				381.000	.0000		83
ALPHA ( 2) =285	BETA	(3) =	4.922	BASE TAP NO	1.990		OF POOR OUALITY
				369.000	2271		<i>⊗</i> .9
				370.000	-,2085		Z 20
				371.000	2129		F 6
				372,000			科塔
				373.999	2112		N. be
				374.000	2276		(C)
				375.000	2216	· · · · · · · · · · · · · · · ·	
				376.000	2252		
				377.000	2256		
				378,000	פפפפ.		
				379.000	2328	•	
	•			389.999	2340		
				381,000	.0000		
ALPHA ( 3) = 3.828	BETA	(1) =	993	BASE CA PAT	1.000		
				369.000	-,2158		
					2074		
				371.000			
				372 - 999	2948		
				373.999	1829		
				374.999			
				375.999	-,2094		
				376,000	2134		
				377.999	2084		
				378,900	.9999		
				379.000	2175		
				389.909	2159	•	
				391 .000	.0000		

4.999

1.199

SRB-OFF MIS-OFF ORB BASE

(REUGSD) ( D4 FEB 75 )

ELV-OB =

# REFERENCE DATA

# PARAMETRIC DATA

8.999

000. 000.1

SREF = 2690.0000 %Q.FT. LREF = 1290.3000 %N. SREF = 1290.3000 %N. SCALE = .0200	YMRF = .	9000 IN. XT 9009 IN. YT 9909 IN. ZT	•	·	ELV-IB = RUDDER = GIMBAL =
SECTION ( 1) ORBITER BASE		DEPENDENT VAR	IABLE CP	•	
ALPHA ( 1) = -4.017 BETA	(1) = .003	BASE	1,990		
		TAP NO			
		369.000	3407		
		370.000	3485		<b>.</b>
		371.000	3556		ORIGINAL PAGE I
		372.000	3500		. ₹
$(\mathbf{x}_{i,j}, \mathbf{x}_{i,j}) = \mathbf{x}_{i,j} \cdot \mathbf{x}_{i,j} \cdot \mathbf{x}_{i,j} \cdot \mathbf{x}_{i,j}$		373.990	3198		<b>15</b> 50
		374.000	3512		88
		375.000	3464	•	A K
		376.990	3464		6
v.		377.999	3449		E M
		376.999	.0000		Z S
		379,000	3510		日图
		390.000	3498		<b>岩</b> 49
		381.000	.0000		自由
ALFHA ( 2) =162 BETA	(1) = -4.000	BASE	1.999		
		CN FIAT			
		369.999	3946		
		379.999	3845		
		371.999	3844		
		372.993	3736		
		373.000	3534		
And the second second		374.999	3854		
		375.993	-,3859		
		376.999	3844		
		377.000	3794		
		378 .999	.0000		
		379.000	3957		
		389.999	3845 .0000		
		381.990	COOLS		
ALPHA ( 2) =141 BETA	(2) = (2)	BASE	1.000		
	•	CM TAT			
		369.000	3383	•	
		379.999	3373		
		371.000	3493		•
		372.000	3357		
		373,000	3074		
		374,000	3368		
ta Tagasa da Kabasa d		375.000	3363		•
		376.999	3368		
		377.000	3331		

(REUGSO)

	ARC1	1-9141A19 O	rs'	SEB-OFF HES	-OFF ORB BA	SE
SECTION ( 1) DRBITER BASE		DEFENDENT VA	ARIABLE (	ir.		
ALFHA ( 2) =14 BETA ( 2) =	.012	BASE	1,999		•	
		TAP NO				
•		378.000	.0000	٠.		
		379.000	3415			
		380.000	3409		•	
		381.000	.0000			
LEPHA ( 2) =234 BETA ( 3) = 4	.025	BASE	1.000			
		CM PAT				
•		369.000	3792			
		379.000	3684			
		371,000	3731			,
	•	372.000	3490			4
		373.999	3629			
		374.000	3656			
		375.000 376.000	3678			
		377,999	3699 3694			
		378,999	3694			
•		379.000	3728			
		380.000	3791			
		381.999	.9999			
FHA ( 3) = 3.879 BETA ( 1) =	.000	BASE	1.990	•		
		TAP NO				
		369.993	3847			
		379.999	3783			
		371,999	3839			
		372.999	3895			
		373.000	3510			
		374.999	3827			
		375.000	3817			
		376.999	3841			
to the second of		377.000	3766			
		378.000	.0000			
		379.000	3915			
		380,000	3856			
		391.000	.0000			

ARC11-D14TA19 OTS SRB-OFF WS-OFF ORB BASE

(REUGS1) ( 04 FEB 75 )

## REFERENCE DATA

SREF = 2690.0000 \$0.FT. XMRP = 976.0000 IN. XT LREF = 1290,3000 N. YMRF = .0000 IN. YT BREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT SCALE = .0200

FARAMETRIC DATA

8.999 ELV-08 = ELV-18 = 4.990 RUDDER = .999 MACH = 1.259 GYIABAL = 1.000

377.999 -.2971

SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CP ALPHA (1) = -4.998 BETA (1) = .999BASE 1.000 TAP NO 369.000 -.2690 379.000 -.2999 371.999 -.2995 372.000 -.2863 373.000 -,2704 374.000 -.2956 375.000 -.2899 376.993 -.2901 377,000 - 2867 378,999 סמפת. 379,000 -.2962 389.009 -.2959 391,000 פמפמ. ALPHA (2) = -.138 BETA (1) = -4.003BASE 1:000 TAP NO 369.999 -.3123 379.999 -.3172 371.000 -.3152 372.990 ~.3936 373.000 -.2831 374.999 -.3113 375.000 -.3107 376.000 -.3120 377.999 -.3967 378,999 .0000 379.000 -.3196 380.999 -.3137 381.000 . ממממ ALPHA (2) = -.225 BETA (2) = .009 BASE 1,000 TAP NO 369.000 -.2887 370.000 -.3006 371,000 -.3062 372.000 -.2968 373,999 -.2727 374,000 -,3006 375.000 -.2976 376.000 -:2990





ARC11-D14TA19 OTS SRB-OFF MIS-OFF ORB BASE SECTION ( S) ORBITER BASE DEPENDENT VARTABLE CF ALPHA (2) = -.22 DETA (2) = .009 1.000 BASE TAP NO 378.000 ממכם. 379.000 -.3954 390.000 -.3039 381.000 .0000 BASE ALPHA (2) = -.252 BETA (3) = 4.022 1,000 TAP NO 369.000 -.3119 370.000 -.3161 371.000 -.3152 372,000 -.2928 373.000 -.2961 374.999 -.3053 375.000 -.3974 376.000 -.3093 377.000 -.3061 378.999 .0000 379.000 -.3139 380.000 -.3112 381.999 פפפפ. ALFHA (3) = 3.864 BETA (1) = .000BASE 1.000 TAF NO 369.000 -.3174 -.3303 370.000 -.3361 371.999 372.999 -.3211 373.000 -.2982 374.000 -.3279 375.999 -.3246 376,999 -.3273 -.3238 377.999 378.000 בככת . 379.000 -.3374 389,999 -.3351

381.000

.0000

(REUGS1)

17 679 11 2

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DATE OF HAY 75
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# TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1322

ARC11-014TA19 OTS SRB-OFF WS-OFF ORB BASE

(REUGS2) ( 04 FEB 75 )

## REFSTENCE DATA

SREF	3	2693.0000	sq.FT.	XMRP	Ŧ	976.9990	īn.	ΧŤ
LREF	=	1290.3004	IN.	YMRP	=	בפפפ.	IN.	ΥT
BREF	=	1290.3000	TN.	ZMRF	=	400.0000	IN.	ZT
SCAFE	•	hnen						

# PARAMETRIC DATA

ELV-18	=	8,000	ELV-DB	=	4,999
RUDDER	=	.000	MACH	=	1,499
GIMBAL	=	1.000			

# SECTION ( 1) ORBITTER BASE

### DEPENDENT VARIABLE CP

376.000 -.2521 377.999 -.2599

ALPHA ( 1) = -3.990	BETA	( 1)	=	.000	BASE	1,000
					TAP NO	
					369.000	2129
					370.000	2704
					371.000	2691
					372,000	2590
					373.990	2278
					374,000	2648
					375,000	2621
					376.990	2595
					377.999	2612
					378.000	בכככי.
					379 .000	2708
					389.999	2645
					391.000	.0000
ALPHA ( 2) =195	BETA	(1)	= -	4 .003	BASE	1,000
	-,	•			TAP NO	
•					369.000	2592
					370,999	2912
					371.000	2800
					372.000	2579
					373.990	2496
	•				374,999	2744
					375.993	2708
					376.000	2747
· · · · · · · · · · · · · · · · · · ·					377.000	2733
					378 .999	.0000
					379.000	2818
					389.000	2792
					381.990	.0000
ALFHA ( 2) =198	BETA	(2)	=	.009	BASE	1.000
			_		TAP NO	
					369.000	2250
					379.999	2792
					371.000	2692
<u>*</u>					372,000	2521
					373,999	2292
					374,090	2527
					375,999	2594





# TABULATED STURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1323

ARC11-014TA19 OTS

SRB-OFF MIS-OFF ORB BASE

(REUG52)

SECTION (	national	BASE			DEPENDENT V	ARTABLE CF
LFHA ( 2)	196	BETA	(2) =	,009	BASE	1.999
					CA PAT	
					378.999	בפפפ,
					379.000	2692
•					389.999	2674
	•				381.999	פפפפ.
NLPHA ( 2)	=186	BETA	(3) =	4.022	BASE	1.000
				•	TAP NO	•
				٠.	369.000	2572
					379.999	2910
	•				371.000	
•					372.999	
					373.92	-
					374.999	
					375.000	
					376.990	
					377,999	-
					378,999	
• •					379.900	
					390.000	
					381.000	פמפמ.
LPHA ( 3)	= 3.960	BETA	(1) =	.999	BASE	1,000
					CA PAT	
					369.000	
					379.999	
					371.999	
			٠.		372.900	
			*		373,999	
					374.999	
			•		375.000	*
					376.000	
				,	377,999	
					378.000	.0000
	C				379.000	
					389,000	
					381 .000	.0000

No.

ARC11-0141A19 OTS SRB-ND4 MFS-DFF ORB BASE (REUGSS) ( 04 FEB 75 )

FARAMETRIC DATA

### REFERENCE DATA

59EF = 2690.0000 \$0.FT. XMRP = 976.0000 IN. XT ELV-IB = 8.999 ELV-08 = LREF = 1290.3000 IN. YMRF = .0000 IN. YT RUDDER = .000 MACH = .900 BREF = 1290.3000 th. ZMRP = 400.0000 IN. 27 GIMBAL = 1.000 SCALE =

SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CF ALPHA (1) = -4.179 BETA (1) = -.003 BASE TAP NO 369.000 -.2250 379.999 -.2183 371.000 -.2272 372.000 -.2320 373.000 -.2223 374.000 -.2352 375.000 -.2359 376.000 -.2425 377.000 -.2421 378.000 .0000 379 .000 - .2485 389.999 -.2534 381.000 פספס. ALPHA (2) = -.339 BETA (1) = -3.997BASE 1.000 TAP NO 369.000 -.2444 379.999 -.2294 371.909 -.2247 372.000 -,2271 373.000 -.2301 374,000 -.2386 375.000 -.2324 376.000 -.2376 377,000 -.2296 378 .000 . פכככ 379.000 -.2493 380.000 -.2401 381.000 , 2000 ALPHA (2) = -.360 BETA (2) = .012 BASE 1.999 TAP NO 369.999 -.2239 379.999 -.2156 371.000 -.2184 372.000 -.2130 373,999 -.2963 374.000 -.2263 375.000 -.2206 376.000 -.2190 377.000 -.2152





DATE 03 MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1325

ARC11-014TA19 OTS

SEB-NOW MES-OFF ORB BASE

(REUG53)

SECTION ( 1)	CRBITER	BASE			DEPENDENT Y	MARIABLE CP
LPHA ( 2) =	360	BETA	(2) =	.012	BASE	1.000
					TAP: NO	;
					378.90	פפפפ, נ
					379.00	2282
					380.000	2242
					381,00	כפפפ. ב
LPHA ( 2) =	411	BETA	( 3)	= 4.922	BASE	1.999
					TAP N	)
					369.00	2393
					379.99	2255
•	* 3				371.00	
*					372.99	2425
					373.00	o:221 C
					374.00	32449
					375.00	
*					376.00	
					377.99	
					378.99	
					379.00	
					380.90	
		•			381.90	פכפפ. ב
LPHA ( 3) =	3.936	BETA	( 1)	=996	BASE	1.000
					TAP N	=
					369.99	
•					379.99	
					371.99	
					372 .90	
					373.99	
			•		374.99	
					375.99	
					376.99	
				•	377.99	
					378.90	
					379.00	
•	1.5				380.90	
					381 .99	ָמכממ, ק

ARCEL-DIATATE OTS SRB-NOW MPS-OFF ORB BASE

(REUGS4) ( D4 FEB 75 )

### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT TY .NI DOCC. = 15MY .NI COCC. CCC. 139.2 ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

SCALE = .0200

SECTION ( 1) ORBITER BASE

## DEPENDENT VARIABLE CP

BASE 1,000 ALPHA ( 1) = -4.149 BETA ( 1) = .000 TAP NO 369,000 -.3304 370,000 -.3265 371.000 -.3380 372.000 -.3360 373.000 -.3134 374,000 -.3304 375.000 -.3256 376.000 -.3313 377.000 -.3275 ממממ, 378.000 379.000 -.3338 390.000 -.3309 פפפם. 381.000 BASE 1.000 ALPHA ( 2) = -.315 BETA ( 1) = -4.903 TAP NO 369.000 -.3652 379,999 -.3562 371.000 -.3497 372.000 -.3457 373,000 -.3409 374.909 -.3542 375.000 -.3523 376.000 -.3579 377,000 '-.3535 378.000 פססס. 379.000 -.3649 389.999 -.3564 391.000 בכככ, BASE ALPHA ( 2) = -.327 BETA ( 2) = .006 TAP NO 369.000 -.3167 370.000 -.3052 371.999 -.3169 372,000 -.3143 373.000 -.2986 374,999 -,3165 375.000 -.3123 376.999 -.3172 377.000 -.3167 PARAMETRIC DATA

4,000 \$.000 ELV-08 = ELV-19 = 1.100 RUDDER = .000 MACH =

GIMBAL = 1,000

# TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

378.993

379.000

385.999 -.3593 381 .000

. 0000

.סססס

-.3628

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SRB-NOM NES-OFF ORB BASE

(REUGS4)

					ARC1	1-014TA19 OT	\$ \$5
SECTI	ion (	110951169	BASE			DEPENDENT VA	RIABLE CF
ALPHA	( 2)	327	BETA	( 2) =	.006	BASE	1,000
4		1.0				CH PAT	
						378,000	.0000
						379,000	3217
						מבת. מפל	3185
					•	381,000	מפפפי.
ALPHA	( 2) :	288	BETA	( 3) =	4.016	BASE	1.000
						CN SAT	
						369,000	3484
						370.000	3367
	-				•	371.000	3371
		100				372,999	3361
						373 .000	3244
						374.000	3384
						375.000	3378
						376.000	3415
					+ ,	377.000	3366
		•				378,999	.0000
						379.000	3445
	•		•			380.000	3423
•						381.000	.0000
ALPHA	( 3).=	3.915	BETA	(1) =	993	BASE	1.500
					-	TAP NO	
						369.000	3579
						379.000	3495
			•			371,999	3556
						372 .999	~.3566
						373.000	3326
						374.000	3558
						375.999	3538
						376.999	3588
						377,000	3542
	- 2					770	

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PAGE 1328
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4.000

ARC11-0141A19 OTS SEB-NOW MES-OFF ORB BASE (REUGSS) ( 04 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

ELV-08 = 8.000 ELV-08 = QUDDE = .000 MACH = GINBAL = 1.000

	0.0000 SQ.FT. 0.3000 TN. 0.3000 TN.	XHRP = YMRP = ZHRP =	.0000	IN. YT		
SECTION ( 1	CRETTER BASE		DEP	ENDENT VA	RIABLE CP	•
ALPHA ( 1) =	-3.981 BETA	= ((1)	.000	BASE	1,000	
				TAP NO	0.17.4	*
				369,000		
	•			370.000 371.000	2482	
				372.000	2534	
				373.000		•
	•	•		374.000		
				375.000		
				376,999 377,999		
				378.000 379.000		
And the second				380.000		
				381.000	-,2537	
* * .				301.333	,,,,,,,	
ALPHA ( 2) =	369 BETA	(1) = -4	กกก	BASE	1.000	
45/14 ( 6)	-1303 SCIA	( 1/ = -4	. 5.33	TAP NO	11333	
				369.000	2703	
				379.000		
				371.000		
N 3				372.000		
				373.999		
				374.999		
				375,590		
				376.000		
				377.000		
				378 .999		
		•		379.000		
				380.000		
				391,000	. 0000	
ALPHA ( 2) =	309 BETA	(2) = .	912	BASE	1.000	
				TAP NO		
		.*		369.000	2521	
				379.999		
				371.000	2532	
				372.999	2529	
				373.000	2340	
				374.000	2512	
				375.000		,
				376.000	2516	
				377.000	2592	

FAGE 1329

ARC11-014TA19 OTS

SRB-NON MES-OFF ORB BASE

(REUGSS)

FHA ( 2) =309 BETA ( 2) = .012  TAF ND 378.099 .0909 379.0902544 380.000 .0000  FHA ( 2) =300 BETA ( 3) = 4.022  BASE 1.000  TAF ND 369.0902681 371.0902681 372.0902681 374.0902664 375.0902662 377.0902662 377.0902662 377.0902683 380.0902683 380.0902640 381.090  FHA ( 3) = 3.966 BETA ( 1) = .003  BASE 1.090  TAF ND 369.0902775 370.0902715 371.0902775 370.0902715 371.0902845 373.0902775 370.0902785 377.0902785 377.0902785 377.0902782 379.0902839 380.0902883	ECTI	W	(	1,)	ORBITER	BASE					DEPENDENT VA	RIABLE CP
379.9992544 389.9902545 381.990 .0999  PHA (2) =399 BETA (3) = 4.922  BASE 1.990 TAF NO 369.9992681 379.9992584 379.9992699 371.9992699 373.9992699 375.9992611 376.9992622 377.9992622 377.9992623 378.9992683 389.9992640 381.9992640 381.9992755 379.9992755 379.9992755 379.9992755 379.9992755 379.9992845 373.9992845 373.9992875 379.9992762 379.9992762 379.9992762 379.9992762 379.9992762 379.9992762 379.9992823	PHA	( 2	)	=	309	BETA	( 2	?)	=	.012		1.000
380.0002545 381.000 .0000  JEHA (2) =300 BETA (3) = 4.022  BASE 1.000 TAP NO 369.0002681 370.0002569 371.0002569 371.0002600 373.0002640 375.0002611 376.0002622 377.0002552 379.0002552 379.0002640 381.0000000  JEHA (3) = 3.966 BETA (1) = .003  BASE 1.000 TAF NO 369.0002775 370.0002775 371.0002775 371.0002775 371.0002845 373.0002845 373.0002871 374.0002788 375.0002788 375.0002788 375.0002788 375.0002788 375.0002788 377.0002762 379.0002762 379.0002762 379.0002762 379.0002839 380.0002839											378.000	. מממפ
RHA (2) =300 BETA (3) = 4.022  BASE 1.000 TAF ND  369.0002681 370.0002584 372.0002600 373.0002624 375.0002624 375.0002611 376.0002622 377.0002552 379.0002683 380.0002640 381.0000000  RHA (3) = 3.966 BETA (1) = .003  BASE 1.000 TAF ND  369.0002775 370.0002715 371.0002752 376.0002752 376.0002752 376.0002798 375.0002798 375.0002798 375.0002798 375.0002798 377.0002798 377.0002798 377.0002798 377.0002762 376.0002762 378.0002762 379.0002762 379.0002762 379.0002785 377.0002785 377.0002785 377.0002785 377.0002785 377.0002782											379.000	
RHA (2) =300 BETA (3) = 4.022  BASE 1.000 TAF ND  369.0002681 370.0002584 372.0002600 373.0002624 375.0002624 375.0002611 376.0002622 377.0002552 379.0002683 380.0002640 381.0000000  RHA (3) = 3.966 BETA (1) = .003  BASE 1.000 TAF ND  369.0002775 370.0002715 371.0002752 376.0002752 376.0002752 376.0002798 375.0002798 375.0002798 375.0002798 375.0002798 377.0002798 377.0002798 377.0002798 377.0002762 376.0002762 378.0002762 379.0002762 379.0002762 379.0002785 377.0002785 377.0002785 377.0002785 377.0002785 377.0002782											380.000	2545
TAF NO 369.0002681 370.0002569 371.0002534 372.0002690 373.0002648 374.0002624 375.0002622 377.0002652 378.0002652 379.0002683 380.0002640 381.0002640 381.0002640 381.0002765 379.0002775 370.0002775 370.0002775 371.0002775	•											
369.0002681 370.0002569 371.0002534 372.0002600 373.0002448 374.0002624 375.0002611 376.0002622 377.0002552 378.0002683 380.0002683 380.0002640 381.0002640 381.0002640 381.0002765 370.0002775 370.0002775 370.0002775 371.0002807 372.0002875 373.0002571 374.0002785 373.0002785 377.0002785 377.0002785 377.0002785 377.0002762 379.0002762 379.0002762 379.0002762 379.0002839 380.0002839	FHA	( 2	)	=	300	BETA	( :	5)	=	4.522		1.000
371.0992534 372.9992699 373.0992648 374.9932624 375.0992624 375.0992622 377.0992552 378.0992683 380.0092683 380.0092640 381.009 .0000  PHA (3) = 3.966 BETA (1) = .903 BASE 1.099 TAF NO 369.0992775 379.0992775 379.0992775 371.0902807 372.0902807 372.0902857 373.0902571 374.0902785 375.0902785 377.0902785 377.0902762 379.0902762 379.0902839 389.0992833						•						2581
371.0992534 372.9992699 373.0992648 374.9932624 375.0992624 375.0992622 377.0992552 378.0992683 380.0092683 380.0092640 381.009 .0000  PHA (3) = 3.966 BETA (1) = .903 BASE 1.099 TAF NO 369.0992775 379.0992775 379.0992775 371.0902807 372.0902807 372.0902857 373.0902571 374.0902785 375.0902785 377.0902785 377.0902762 379.0902762 379.0902839 389.0992833												
373.0002448 374.0002624 375.0002611 376.0002622 377.0002552 378.000 .0000 379.0002683 380.0002640 381.000 .0000  APHA (3) = 3.966 BETA (1) = .003 BASE 1.000 TAP NO 369.0002775 370.0002775 371.0002807 372.0002817 374.0002851 373.0002785 375.0002785 377.0002785 377.0002785 377.0002785 377.0002785 377.0002785 377.0002785 377.0002785 377.0002785 379.0002785 379.0002785												
374.9992624 375.9992611 376.9992622 377.9992552 378.0992633 389.9992640 381.9992640 381.9992640 381.9992775 379.9992775 379.9992775 371.9992845 373.0902785 374.9992785 375.9992785 377.9992785 377.9992785 377.9992762 379.9992762 379.9992839 389.9992833											372.000	2600
375.0002611 376.0002622 377.0002552 378.000 .0000 379.0002640 381.000 .0000 381.000 .0000  TAF NO 369.0002775 370.0002775 371.0002807 372.0002845 373.0002845 373.0002785 374.0002785 376.0002785 377.0002785 377.0002785 377.0002762 379.0002762 379.0002762 379.0002762 379.0002839 380.0002839											373.000	2448
376.0002622 377.0002552 378.000 .0000 379.0002683 380.0002640 381.000 .0000  PHA (3) = 3.966 BETA (1) = .003 BASE 1.000  TAP NO 369.0002775 370.0002775 371.0002807 372.0002845 373.0002571 374.0002798 375.0002752 376.0002755 377.0002762 379.0002762 379.0002762 379.0002839 380.0002839											374.000	2624
377.0002552 378.000 .0000 379.0002683 380.0002640 381.000 .0000  EMA (3) = 3.966 BETA (1) = .003 BASE 1.000 TAF NO 369.0002775 370.0002715 371.0002807 372.0002845 373.0002571 374.0002785 375.0002785 377.0002785 377.0002762 379.0002762 379.0002762 379.0002839 380.0002833											375,999	2611
378.000 .0000 379.0002683 380.0002640 381.000 .0000  PHA (3) = 3.966 BETA (1) = .003 BASE 1.000 TAF NO 369.0002775 370.0002775 371.0002807 372.0002845 373.0002571 374.0002785 375.0002785 377.0002785 377.0002785 379.0002762 379.0002762 379.0002839 380.0002833				•							376.990	2622
379.0002683 380.0002640 381.000 .0000  EMA (3) = 3.966 BETA (1) = .003  BASE 1.000 TAP NO 369.0002775 370.0002715 371.0002807 372.0002807 372.0002571 374.0002571 374.0002752 376.0002752 376.0002762 379.0002762 379.0002762 379.0002839 380.0002833				•							377.999	2552
380.0002640 381.000 .0000  PHA (3) = 3.966 BETA (1) = .903  BASE 1.000  TAP NO 369.0002775 370.0002807 371.0002807 372.0002845 373.0002571 374.0002752 376.0002752 376.0002762 379.0002762 379.0002762 379.0002839 380.0002833											378,999	.0000
381.000 .0000  TAP NO TAP NO 369.0002775 370.0002715 371.0002807 372.0002851 373.0002571 374.0002752 376.0002752 376.0002762 379.0002762 379.0002762 379.0002839 380.0002839											379.000	2683
PHA (3) = 3.966 BETA (1) = .003  TAF ND  369.0002775  370.0002807  371.0002807  372.0002845  373.0002571  374.0002752  376.0002752  376.0002762  379.0002762  379.0002839  380.0002833											380.000	2640
TAF NO 369.0002775 370.0002715 371.0002807 372.0002845 373.0002571 374.0002798 375.0002752 376.0002785 377.0002762 378.0002762 379.0002839 380.0002823											381.000	.0000
379.0002715 371.0002807 372.0002845 373.0002571 374.0002798 375.0002752 376.0002765 377.0002762 378.0002762 379.0002839 389.0002823	PHA	( 3	)	=	3.966	BETA	( 1	()	=	.003		1.000
371.0002807 372.0002845 373.0002571 374.0002798 375.0002752 376.0002765 377.0002762 378.0002762 379.0002839 380.0002823											369.000	2775
372.0002845 373.0002571 374.0002798 375.0002752 376.0002785 377.0002762 378.0002762 379.0002839 380.0002823											379.000	2715
373.0002571 374.0002798 375.0002752 376.0002785 377.0002762 378.000 .0000 379.0002839 380.0002823											371.999	2897
374.0002798 375.0002752 376.0002785 377.0002762 378.000 .0000 379.0002839 380.0002823							* .				372,000	2845
375.0002752 376.0002785 377.0002762 379.000 .0000 379.0002839 380.0002823											373.999	2571
376.2002785 377.2002762 379.200											374.999	2798
377. 0002762 379.000 0000 983 000.75 380 000.000											375.990	-,2752
2000, 200.875 2839 200.975 382 200.085											376.000	2785
379.0002839 380.0002823											377.000	2762
380.9992823											379,990	, ממממ
380.9992823						*					379.000	2839
					-							
											381.999	.995*

ARC11-014TA19 OTS

SRB-NOM MES-OFF ORB BASE

(REUGS6) ( D4 FEB 75 )

#### REFERENCE DATA

# SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT TY .NI CCCC. = TRNy .NI CCCC. 2020 IN. YT

BREF = 1290.3000 IN. SCALE = .0200

ZMRF = 400,0000 TN. ZT

SECTION ( 1) ORBITER BASE

#### DEPENDENT VARIABLE CP

376,999 -.8995 377.999 -.1993

ALFHA (1) = -4.071 BETA (1) = .000 BASE 1.000 TAP NO 369.000 -.1791 370.000 -.1954 371.000 -.1961 372.000 -.1897 373.000 -.1729 374.000 -.1972 375,000 -.1951 376,000 -.1949 377.999 -.1994 378,000 .0000 379.900 -.1971 380.000 -.1986 381.000 פכפפ. 1.000 BASE ALPHA ( 2) = -.294 BETA ( 1) = -4.999TAP NO 369.000 -.2039 379.999 -.2011 371.000 -.1978 372.000 -.1668 373.000 -.1906 374.999 -.1895 375.000 -.1904 376.000 -.1953 377.000 -.1940 378,999 ,9999 379.000 -.2004 380.000 -.2011 381,990 ALFHA (2) = -.379 BETA (2) = .009 BASE 1.000 TAP NO 369.000 -.1941 370.000 -.1955 371.000 -.2032 372.000 -.1973 373.999 -.1772 374.000 -.2026 375.999 -.2991

FARAMETRIC DATA

4,999 5 V-18 = 8.909 ELV-08 = .000 MACH = 1.400 RUDDER =

GIMBAL = 1.000

FAGE 1331

(REUGS6)

ARC11-014TA19 OTS SRB-NOM MES-OFF ORB BASE SECTION ( 1) ORBITER BASE DEPENDENT VARIABLE CF ALPHA ( 2) = -.375 BETA ( 2) = .009 BASE TAP NO 379.000 .,0000 379.000 -.2074 389,990 -.2975 381,000 .0000 ALPHA (2) = -.425 BETA (3) = 4.028 BASE 1.000 CH PAT 369.000 -.2042 370.000 -.2028 371.000 -.2067 372.000 -.1972 373 .000 -.1634 374.000 -.2003 375.000 -.1969 376.990 -.1989 377.000 -.1958 378,000 במפפ. 379.000 -.2058 380.000 -.2041 381,000 .0000 ALPHA ( 3) = 3.834 BETA ( 1) = -.903 BASE 1.000 TAP NO 369.000 -.2057 379.999 -.2971 371.000 -.2112 372.000 -.2071 373.000 -.1828 374,999 -.2945 375.000 -.2042 376,999 -.2954 377.999 -.2999 378.000 . 2000 379.000 -,2093 389,999 -.2976 381,000 בככם.

1.250

# ARC11-014TA19 OTS+STRUT SRB-NOM+MPS-NOM+ORB BASE

(REUGS7) ( 84 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

1.000

= 80-V3 CCC.8 = HJAP CCC.

SREF = 2690.0000 SQ.FT.	X49F = 976.000	D IN. XT		£_V-18
LREF = 1290.3000 IN.	ימם. = קאוץ	דץ או מ		RUDDER
99EF = 1290.3000 IN.		ID IN. ZT		GINBAL
SCALE = .0200				
SECTION ( 1) ORBITER BASE	DE	GENDENT VARIABLE	CP ·	
ALPHA ( 1) = -4.497 BETA	(1) = .003	9ASE 1,000		
		TAP NO		
		369,000318	6	
		370.000406		
		371.000409	6	
		372,000407	5	
		373,000 -,413	6	
		374.000362	3 -	
		375,000410	9	
••		376.000337	• •	
		377.000401		
		378.000370		
		379.000298		
		389,999 -,399		
		381,000 -,319		
ALPHA ( 2) =339 BETA	(1) = -3.997	BASE 1.000		
		369.999378	8	
		379.999413	8	
		371.000429	3	
		372.990 -,415	1	
		373.000428	9	
		374.0003929	ס	•
•		375.0004239	5	
		376.000352	4	•
		377.0004196	5	
		378 .0003911		
	* *	379.0003499	5	
		380.0003239		
		391.5903463		
ALPHA ( 2) =469 BETA	(2) = .019	BASE 1.000	· · · · · · · · · · · · · · · · · · ·	
		CV PAT		
		369.0003369	<b>3</b> .	
		379.9994997	<b>?</b>	
		371.000400	5 .	
		372.0004015		
		373.0004094	<b>:</b>	
		374.9993553	3	
		375.0004096	5	
		376,0003250	3	
		377.0003952	<u>}</u>	

THE RESERVE THE PROPERTY OF THE PARTY OF THE

PAGE 1333

# ARC11-0141A19 OTS+STRUT SRB-NOM+VPS-NOM+ORB BASE

(REUGS?)

ALPHA (2) =465 BETA (2) = .019  BASE TAP NO 378.000 379.000 381.000 381.000 371.000 372.000 373.000 374.000 376.000 379.000	DEPENDENT VARIA	BLE C
378.000 379.000 381.000 381.000 381.000 370.000 371.000 376.000 376.000 376.000 379.000 381.000 381.000 379.000 381.000 381.000 370.000 381.000 371.000 370.000 371.000		.000
380.000 381.000 381.000 381.000 381.000 369.000 371.000 376.000 376.000 376.000 376.000 381.000		
380.000 381.000 381.000 3ALPHA (2) =435 SETA (3) = 4.031  SASE TAP NO 369.000 370.000 371.000 374.000 375.000 376.000 377.000 378.000 379.000 381.000 371.000	· · · · · · · · · · · · · · · · · · ·	3681
381.000 ALPHA (2) =435 SETA (3) = 4.031  SASE TAP NO 369.000 370.000 371.000 375.000 376.000 377.000 378.000 379.000 381.000 379.000 371.000		3097
ALPHA (2) =435 BETA (3) = 4.931  TAP NO 369.000 370.000 371.000 372.000 375.000 376.000 376.000 379.000 381.000 381.000 379.000 371.000	· · · · · · · · · · · · · · · · · · ·	2946
TAF NO 369.000 370.000 371.000 372.000 374.000 376.000 377.000 380.000 381.000 381.000 371.000	381.000 -	.3246
369.000 370.000 371.000 372.000 373.000 374.000 375.000 376.000 379.000 380.000 381.000  LPHA (3) = 3.696 BETA (1) = .003  BASE TAP NO 369.000 370.000 371.000 372.000 371.000 372.000 373.000 375.000 376.000 377.000 377.000 377.000 377.000 377.000 377.000 378.000 379.000 379.000 379.000	(3) = 4.931 SASE 1.	מממ.
370.000 371.000 372.000 373.000 374.000 375.000 376.000 379.000 380.000 381.000  LFHA (3) = 3.656 BETA (1) = .003  BASE TAP NO 369.000 370.000 371.000 372.000 371.000 372.000 374.000 375.000 376.000 377.000 376.000 377.000 376.000 379.000 379.000 379.000		
371.000 372.000 373.000 374.000 375.000 376.000 377.000 380.000 381.000 381.000  UPHA (3) = 3.696 BETA (1) = .003  BASE TAP NO 369.000 370.000 371.000 372.000 373.000 374.000 375.000 376.000 376.000 377.000 376.000 377.000 378.000 379.000 379.000 379.000		3622
372.000 373.000 374.000 375.000 376.000 377.000 378.000 380.000 381.000  Section 1 = .003  BASE TAP NO 369.000 370.000 371.000 371.000 372.000 373.000 374.000 375.000 376.000 377.000 377.000 378.000 379.000 379.000 379.000 379.000 379.000	•	4192
373.000 374.000 375.000 376.000 376.000 379.000 381.000 381.000 381.000 381.000 381.000 370.000 371.000 371.000 372.000 374.000 375.000 376.000 377.000 376.000 377.000 378.000 379.000 379.000 379.000 379.000 379.000	· · · · · · · · · · · · · · · · · · ·	4941
374.000 375.000 376.000 377.000 380.000 381.000 381.000 381.000 381.000 372.000 371.000 372.000 372.000 373.000 374.000 375.000 376.000 377.000 377.000 377.000 379.000 379.000		4235
375.000 376.000 377.000 378.000 379.000 381.000 381.000  BASE TAP NO 369.000 370.000 371.000 372.000 374.000 374.000 376.000 377.000 377.000 377.000 377.000 377.000 377.000 377.000 377.000		4988
376.000 377.000 378.000 379.000 380.000 381.000  September 1	•	3850
377.000 378.000 379.000 380.000 381.000  September 1	-	4298
378.000 379.000 381.000  Selection of the process o	- · · ·	3335
379.000 381.000  Selection of the process of the pr		4071
380.000 381.000  LPHA (3) = 3.696 BETA (1) = .003  BASE TAP NO 369.000 370.000 371.000 372.000 374.000 375.000 376.000 377.000 378.000 379.000 379.000 379.000 379.000		3828
381.000  LEHA (3) = 3.696 BETA (1) = .003  BASE TAP NO 369.000  370.000  371.000  372.000  373.000  374.000  375.000  376.000  377.000  378.000  379.000  379.000  379.000  379.000  379.000  379.000		3432
BASE TAP NO 369.000 379.000 374.000 377.000 37	•	3000
TAP NO 369.000 370.000 371.000 372.000 373.000 374.000 376.000 377.000 379.000 379.000 380.000		3385
369.000 370.000 371.000 372.000 373.000 374.000 376.000 377.000 378.000 379.000 380.000	,	מפמ
379,000 371,000 372,000 373,000 374,000 375,000 376,000 378,000 379,000 380,000		
371.000 372.000 373.000 374.000 375.000 376.000 378.000 379.000 380.000		3516
372.000 373.000 374.000 375.000 376.000 377.000 378.000 379.000 380.000		4977
373,000 374,000 375,000 376,000 377,000 378,000 379,000 380,000		4968
374.900 375.900 376.990 377.000 378.000 379.000 380.900		4936
375.900 376.990 377.000 378.000 379.000 380.000	· · · · · · · · · · · · · · · · · · ·	1987
376.000 377.000 378.000 379.000 380.000		891
377,000 378,000 379,000 380,000		1190
379.000 379.000 380.000		3267
379.000 380.000		927
3en.000		763
	· -	314
381 000	_	
301.433	381.0003	307

4.000

1.400

ARC11-0141A19 OTS+STRUT SRB-LOW MPS-NOW ORB BASE

(REUG58) ( 04 FEB 75 )

# REFERENCE DATA

# PARAMETRIC DATA

SREF LREF BREF SCALE	=	1290 1290	.0000		XMRP YMRF ZMRP	=	<b>0000.</b> 0000. 0000.0	IN.	ΥT			ELV-IB = RUDDER = GIMBAL =	000.8 000. 000.1
SECT	NCI	(1)	ORBITE	R BASE			DEFI	ENDEN	T VAR	TABLE CP			
ALEHA	. ( 1	L) =	-4.155	BETA	(1) =	.999	)	BAS	E	1.000			
•								TAP	NO				
								369.	ממפ	2772			
								379.	פככ	3144			
	1.1							371.	999	3156			
								372.	מממ	3144			
								373.	מפפ	3186			
			,					374.	מממ	2880	•		
								375.	מכפ	3211			
								376.	מממ	2696			
								377.	סממ	3195			
								378.	מממ	2938			
								379.	200	2793			
								389.	פכפ	2463			
								381.	מממ	2548			
ALPHA	. (2	2) =	34	BETA	(1) =	4.928		BAS	E	1.000			
		-			•			TAP					
			*.					369.		2981			
				•				379.		3284			
•								371.		3992			
								372.		3276			
								373.		3111			
								374.		3015			
								375.		3250			
								376.		2651			
								377.		3105			
								378		2921			
								379.		2776			
						,		389.		2555			
								391.		2736			
						•							







TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1335

4,999 1,259

ARC11-0141A19 OTS+STRUT SRB-NON NES-OFF ORB BASE

(REUG59) ( 94 FEB 75 )

#### DEFERENCE DATA

DATE 03 MAY 75

#### FARAMETRIC DATA

REFERENCE DATA				FARAMETRIC	DATA
SREF = 2690,0000 SQ.FT. XHRF = 976.009	DO IN. XT		ELV-18	3 = 8.999	ELV-OB =
the state of the s	D IN. YT		RUDDER		MACH =
	19 IN. 2T		GTMBAL		
SCALE = .0290	21			,	
SECTION ( 1) ORBITER BASE DE	PENDENT VARIAB	LECP			
ALPHA ( 1) = -4.000 BETA ( 1) = .012	BASE 1.	000		•	
	TAP NO				
	369.000:	2561			
	370.000:	2456			
	371.990	2511			
	372.000	2585			
	373,000	2463	•		
	374.993*	2548			
	375.000	2492			
	376.999	2599			
	377.000	2478			
	378.999:	2471			
	379.900:	2550			
	380.000:	2550			
	381.999:	2597	•		
ALPHA ( 2) =375 BETA ( 1) = .012	BASE 1.	999			
	CM TAT				
	369.0002	2562			
	379.995:	2328	•		
	371.999:	2484			
	372.000:	2534			
		2352			
		2500			
	375,999:	2476			•
	376.0002	2512			
	377.0002	2494			
	378.0002	2492 .	•		
	379.9002	2541 -			
	389.9992	2548			
	381.000	2552			
ALPHA ( 2) = -,333 BETA ( 2) = 4.931	BASE 1.0	200			
· · · · · · · · · · · · · · · · · · ·	TAP NO				
. The state of the		2949			
		2733		•	
		2723			
		2776			
		2596			
		2799	•		
		2760			
		2704			

376.999 -.2794 377.999 -.2769 DATE DS MAY 75

TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1336

ARC11-014TA19 OTS+STRUT SRB-NO4 MES-OFF ORB BASE

(REUG59)

SECTION ( 1) DRBITER BASE

DEPENDENT VARIABLE CP

ALFHA ( 2) = -.333 BETA ( 2) = 4.031

BASE 1.000

TAP NO

378.990 -.2776

379.000 -.2881

380.000 -.2824

381 .000 -.2847

				_
n	 •	72	MAY	78

# TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1337

ARC11-0141A19 OTS+STRUT-SRB-HT MFS-NOM ORB BASE

(REUG60) ( 04 FEB 75 )

# REFERENCE DATA

#### PARAMETRIC DATA

SREF =	2690.0000 SQ.FT.	XMRF =		ELV-IB =		ELV-08 =	
LREF =	1299.3999 IN.	A MAGIL =	TY MI CCCC.	RUDDER =	,1100	mach =	1,259
BREF =	1290.3000 IN.	ZMRP =	400.0000 IN. ZT	GINBAL =	1,000		
	2000						

#### SECTION ( 1) ORBITER BASE

#### DEPENDENT VARIABLE CF

LFHA	• (	1)	= -4.12	BETA	(1) =	.012	BASE	1,999
							TAP NO	
							369.000	3233
							370.000	3635
							371.000	3728
							372.000	3672
							373.000	3767
							374.000	3131
						•	375.000	3853
							376.000	-,2916
							377.000	3651
							378.000	3339
							379.000	2527
							380.000	-,2405
							391,000	-,2757

ORIGINAL PAGE IS OF POOR QUALITY

ARC11-014TA19 OTS+STRUT SRB-OFF MS-OFF ET BASE

(REU101) ( 04 FEB 75 )

# REFERENCE DATA

# FARAMETRIC DATA

SECTION ( 1) ET BASE DEPENDENT VARIABLE CF  ALPHA ( 1) = -3.993 BETA ( 1) = .000  -3401336934943474 30.000336934943545 90.00034933563 90.00034933563 120.00034933363 120.00033933164 150.00033953614 150.00033953661 1210.00033953661 210.00033953661 210.00033953562 220.00034033562 220.00034033566 300.00035953573 300.00035953598 100.00033953511 100.00033953511 100.00033953511 100.00033953511 100.00033953511 100.00033953511 100.00035953598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00034653598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.00035553598 100.000359035953595 100.000359035953595 100.000359035953595 100.000359035953595 100.000359035953595 100.000359035953595 100.000359035953595 100.000359035953595 100.000359035953595	99EF = 1290.0000 19EF = 1290.3000 89EF = 1290.3000 9CALE = ,0200	IN.	XMRP = 2MRP =	. ,000	0 IN, XT 0 IN, YT 10 IN, ZT				ELV-18 RUDDER GINBAL	000.	ELV-OB =	4.000 .900
7HI	SECTION ( 1) ET BA	SE		DE	PENDENT VA	RIABLE CP						
30.00033693443474 30.00034553555 50.00034553555 50.00034913543 90.00034633331 120.00034633331 135.00033843184 130.00032952995 180.00032952995 180.00033983267 195.00033963561 210.00034053561 2210.00034053564 225.00034063526 270.00034063526 270.00034063526 270.00034073552 270.00034603552 270.00034603552 270.00034603552 270.00034603552 270.00034603552 270.00034603552 270.00034603553 280.00034603492 99.00034603508 120.00034603508 120.00034603508 120.00034603508 120.00034603508 120.00034603508 120.00034603508 120.00034603508 120.00034603508 120.00034603508 120.00034603373 135.00034543373 135.00034543373 135.00034543373 135.00034543373 135.00034563373 135.00034563373 135.00034563373 135.00034563373 135.00034563373 135.00034563373 135.00034563373 135.00034563373 135.00034563373 135.00035563661 210.00035503661 220.00035503661 220.00035503661 220.00035533653 240.00035533553	ALPHA ( 1) = -3.99	3 BETA	(1)=	.000		.000	.333	. 557				
30,00034553565  60,00034613545  90,00034633363  120,00034633363  120,00034633363  120,00034633364  150,00033843184  150,00033343267  195,00032952996  180,00034053564  210,00034053564  225,00034053466  300,00034053466  300,00034053466  300,00034053465  300,000346135652  ALPHA (2) =210 BETA (1) = -4.006  ALPHA (2) =210 BETA (1) = -4.006  ALPHA (2) =210 BETA (1) = -4.006  ALPHA (2) =34053561					-							
\$0.00034913545 90.00034633363 120.00034633363 120.00034133331 135.00033843184 150.00033343184 165.00033252996 180.00033963561 210.00033963561 210.00034053642 225.00034053642 2240.00000003556 270.00034033562 270.00034033562 270.00034033555 330.00034613652  ALEHA (2) =21 SETA (1) = -4.905 RADIUS .000 .3333 .667						3369						
90,000 -3468 -3353 120,000 -3413 -3331 135,000 -3343 -3331 135,000 -3344 -3314 150,000 -3334 -3948 165,000 -3255 -2996 180,000 -3395 -3561 190,000 -3395 -3561 210,000 -3395 -3561 210,000 -3395 -3662 240,000 -0,000 -3366 300,000 -3393 -3575 300,000 -3393 -3575 300,000 -3393 -3575 300,000 -3361 -3652  ALEHA (2) =216 BETA (1) = -4.006												
120.00034133331 135.00033843184 150.00033843184 150.00032952996 180.00033953611 210.00034053642 225.00034053642 240.00034063642 240.00034063642 240.00034063546 270.00034903575 330.00034813652  ALEHA (2) =218 BETA (1) = -4.006  RADIUS .000 .3333 .667  PHI  .0003456 .350034823510 60.00034603492 90.00034603492 90.00034603393 135.00034603374 150.00034603374 150.00034603373 135.00034603373 135.00034603373 135.00034503373 135.00034503373 135.00034503373 135.00035503661 210.00035503661												
135.00033843184 150.00033343048 165.00032952995 160.00033953561 195.00034953694 225.00034053562 240.00000003566 220.00034033566 220.00034033566 270.00034033566 300.00033993575 300.00034983652  ALPHA (2) =210 SETA (1) = -4.006 RADIUS .000 .3333 .667												
150.00033343048 165.00032952996 180.00033963267 195.00033953611 210.00034053564 220.00034063562 240.00034063566 270.00034033466 300.00033993575 330.00034813652  ALPHA (2) =210 BETA (1) = -4.006 RADIUS .000 .3335 .667  PHI .000351535003472 30.00034893610 60.00034893610 60.00034803508 120.00034803373 135.00034803373 135.00034833374 150.00035443273 165.00034923311 160.00035403311 160.00035403311 160.00035503561 210.00035503561 210.00035503561 210.00035503561 210.00035503563 220.000 .000035533661 210.00035503663 270.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 225.00035503673 227.00035503673												
165.00032952996 180.00033953267 195.00033953267 195.00033953561 210.00034053564 225.00034053564 2260.00034053564 2270.00034053642 240.00034053466 300.00034053466 300.00034053466 300.00034053552  ALPHA (2) =21												
270.020	•	. *									alien.	
270.020											28	
270.020				•							明智	
270.020		•							•		FO 93	4
270.020											22	4
270.020										•	유	>
270.020											ا مح	
30.000351535003472 30.00034883610 60.00034603492 90.00034263508 120.00034383373 135.00034383374 150.00034543273 165.0003492 180.0003492 180.0003493 180.0003493 180.00035053661 210.00035003673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553											. <u> </u>	ひ
30.000351535003472 30.00034883610 60.00034603492 90.00034263508 120.00034383373 135.00034383374 150.00034543273 165.0003492 180.0003492 180.0003493 180.0003493 180.00035053661 210.00035003673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553												R
30.000351535003472 30.00034883610 60.00034603492 90.00034263508 120.00034383373 135.00034383374 150.00034543273 165.0003492 180.0003492 180.0003493 180.0003493 180.00035053661 210.00035003673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553					330.000		3481	3652			H	띪
30.000351535003472 30.00034883610 60.00034603492 90.00034263508 120.00034383373 135.00034383374 150.00034543273 165.0003492 180.0003492 180.0003493 180.0003493 180.00035053661 210.00035003673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553	ALPHA ( 2) =21	BETA	(1) =	-4.006		.000	.333	.667			T X	E E
60.000					.000	3515	3599	3472				
60,00034603492 90,00034263508 120,00033543373 135,00034383374 150,00034543273 165,00034903331 180,00034403331 195,00035053661 210,00035073673 225,00035543633 240,000 .00003563 270,00035503563 270,00035043553					30.000		3498	3610				
120,00033643373 135,00034383374 150,00034543273 165,00034543273 165,00033933311 180,00034403331 195,00035053661 210,00035073673 225,00035543633 240,000 .00003563 270,0003563 270,00035633472 300,00035043553							3460	3492			*	
135.000					90.000		3425	3598				
150.00034543273 165.00033933311 180.00034403331 195.00035053661 210.00035303673 225.00035543633 240.000 .00003563 270.00035303472 300.00035533472					120,000		3354	3373				
165.00033933311 180.00034403331 195.00035053661 210.00035303673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553					135.999		-,3438	3374				
180.00034403331 195.00035053661 210.00035303673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553					150.000		3454	3273				
195.00035053661 210.00035303673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553					165.000		3393	3311				
210.00035303673 225.00035543633 240.000 .00003563 270.00035303472 300.00035043553			-		189.999		3440	-,3331				
225,00035543633 240,000 .00003563 270,00035303472 300,00036043553					195.993		3595	3661				
225,00035543633 240,000 .00003563 270,00035303472 300,00036043553							3530	3673		•		
240.000		•										
270.000											•	
309.99935943553												
		•										
					-							•



PAGE 1339

# ARC11-0141A19 OTS+STRUT SRB-OFF N'S-OFF ET BASE

(REUIDI)

CFFT	7 ~41		BASE

# DEPENDENT VARIABLE CE

2001	1.74	( 1)	E1 0420	•				DEFENSENT VA	RYABLE CE	•	
LPHA	( 2	) · =	336	BETA	( 2)	=	.006	RADIUS PHI	.999	.333	.667
								.000	~.3287	-,3349	3193
								30,000		3369	3478
								60,000		3362	3347
								90,000	•	3299	3292
								120.000		3171	3264
								135.000		3181	3972
					•			150,000		3116	2952
								165.000		3072	- 2996
								180.000		3129	3046
								195,000		3177	3432
								210,000		3246	3549
								225,000		-,3309	3446
								249.999		מפפם.	3351
								279.999		3332	3298
		•						300.000		3337	3318
								330.000		3379	3397
LPHA	( 2	) =	22k	BETA	( 3)	=	4.925	RADIUS	.000	.333	.667
								PHI			
								.999	3599	3516	3471
								30.000		3498	3547
								60.000		3500	
								90.000		3433	3289
								120.000		3335	3362
					-			135.999		3325	~.3495
								159.999		3356	-:3431
								165.999		3232	3493
								180.000		3332	3536
								195,000		3369	3731
								219.999		3483	3878
								225.999		3475	3752
						•		240.000		בפפפ.	~.3553
								279.999		3490	3510
								399.999		3524	3449
								339.999		3555	3581
.FHA	(-3)	#	3.948	BETA	(1)	=	.000	RADIUS PHI	.999	.333	.667
									3010	1077	344.
								000.	3212	3233	3114
								39.990 60.000			3389
								60.000 60.000			3208
											3245
								129.000		3194	3211
								135.000		3121	3089
								150.000			2915
								165.000			2754
								190.000		3135	2859

195,000

-.3218 -.3356

ORIGINAL PAGE IS OF POOR QUALITY, ARC11-014TA19 OTS+STRUT SRB-OFF MTS-OFF ET BASE

(REUIDI)

SECTION ( 1) ET BASE

DEPENDENT VARTABLE CP

ALPHA ( 3	) = 3.948	BETA	(1)=	.000	RADIUS	.000	.333	. 667
					PHI 210.000		- , 3235	
					225.000		3239	3458
					240.000	•	.0000	3324
					270.000		3292	3244
					300,000		3322	3206
					330,000		3271	3393



FAGE 1341

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ET BASE

(REU102) ( 04 FEB 75 · )

# REFERENCE DATA

#### PARAMETRIC DATA

SREF       =       2690.0000 SQ.FT.         LREF       =       1290.3000 IN.         BREF       =       1290.3000 IN.         SCALE       .0200	XMRF = 976.0000 IN. XT YMRF = .0000 IN. YT ZMRF = 400.0000 IN. ZT		ELV-IB = 8.000 RUDDER = .000 GIMBAL = 1.000	MACH = 1.100
SECTION ( 1)ET BASE	DEFENDENT VAR	RIABLE CF		
ALFHA ( 1) = -4.176 BETA	8010AR CCC. = (1)	.099 .333 .667		•
	.000 .000.00	404941124104 41614304		

.000	4040	4112	4104	
30.000		-,4161	4394	
60.000		-,4090	4439	
90.000		4099	4433	
120,000		4969	4133	
135.000		4105	4101	
150.000		4978	4967	
165.000		4021	4023	
180,000		4937	- 3970	
195.000		4975	4268	
219.999		4127	4295	
225,999		4176	4350	
249.993				
270,000				
300.000		4009	4270	
339.000		4936	4149	
	30.000 60.000 90.000 120.000 135.000 150.000 165.000 180.000 210.000 225.000 240.000 270.000	30.000 60.000 90.000 120.000 135.000 150.000 165.000 180.000 210.000 225.000 240.000 270.000	30.0004161 60.0004090 90.0004099 120.0004069 135.0004078 165.0004075 180.0004075 210.0004127 225.0004127 225.0004176 240.0004151 300.0004099	30.00041614304 60.00040904439 90.00040994430 120.00040684133 135.00041054101 150.00040784067 165.00040373970 195.00040754268 210.00041274295 225.00041764350 240.00041514400 300.00040994270

		339.000		4936	4149
ALPHA ( 2) =294 BETA	( 1) = -4.993	RADIUS PHI	.000	.333	.667
		כככ.	-,4201	4320	4483
		30.000		4328	4522
		60.000		4362	4422
		90.000		4394	4508
		129,999		4325	4378
		135.999		4346	4451
		150.000		4394	4579
		165.000		4195	4549
		180.000		4152	4178
		195.000		4109	4238
		219,999		4192	4254
		225.999		4110	4201
	•	249.999		ממפס.	4243

270,000 300,000

339.999

-.4325 -.4471

-.4347 -.4488

# ARC11-D141A19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REUTOS)

SECT	101	(1)	ET	BASE
------	-----	-----	----	------

# DEPENDENT VARIABLE CP

SECTION ( 1) ET BASE	DELENSENT ANGTABLE CL		
ALPHA ( 2) =252 BETA ( 2) = .009	RADIUS .000 FHI	.333	. 667
	.0003664		3977
	30.000		4132
	60.000	3955	4201
	90.000	3975	4251
	120.000	3901	4928
	135.990	3897	3825
	150.000	3817	3749
	165,999	3738	3795
	180.000	3750	3661
	195.000	3762	3912
	219.999	3749	3958
	225.000	3796	3988
	240.000	.0000	4092
	270,999	3745	-,4115
	300.000	3765	4178
	330.000	-,3790	-,4929
ALPHA ( 2) =225 BETA ( 3) = 4.028	CCC. ¿UICAS IHS	.333	.667
		-,4209	4351
	30,000	4225	4365
	60,999	4228	4397
	90.000	4121	4353
	120.000		4131
	135,000		4105
	150.000		4198
	165.000	4014	4210
•	189,999	-,4099	4943
	195.000	-,4125	4450
	210.000	4218	4594
	225,000	4262	4438
	249.000	.0000	4417
	270,000	4291	4324
the state of the s	300.000	4269	4322
	330,000	4241	-,4395
	3301000	-17671	
ALPHA ( 3) = 4.026 BETA ( 1) = .000	CCC. SUICAP	.333	.667
	PHI TOTAL	9.000	4074
	.0003971	-,3992	4134
	30.000	-, 4967	4321
	60.000	4095	4227
	90.00	4953	4292
	120.000	- 4008	4093
	135,000	4933	4918
	150.000	4994	3950
	165.000	3922	3924
	190,000	3969	3881
	195,000	3952	4151
	•		

DATE 03 44Y 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1343

ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REUIDE)

SECTION ( 1) ET BASE

DEFENDENT VARIABLE CP

LFHA	( 3) =	4.026 BE	TA, (1) =	.000	RADIUS PHI	.000	.333	.667
•					210.000	•	3950	4156
					225.000		3985	4122
					249.999		,0000	4985
					270,000	•	3916	4156
					300.000		3845	4033
					330.000		3995	4110

ORIGINAL PAGE IS

# ARC11-014TA19 OTS+STRUT SRB-OFF NFS-OFF ET BASE

(REU103) ( 04 FEB 75 )

FARAMETRIC DATA

# REFERENCE DATA

4,000 8.000 ELV-08 = ELV-18 = SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT 1.250 RUDDER = eee, MACH = TREF = 1290.3000 IN. YMRF = TY ANT CCCC. 1,000 GIMBAL = ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. SCALE = .9299

-.3319 -.3521

SECTION ( 1)ET BASE	DEPENDENT VARIABLE CP		
ALPHA ( 1) = -4.182 BETA ( 1) = .003	RADIUS .000 PHI	.333	.667
	.9993281 -	.3341	3418
		.3418	3576
			3534
			3599
			3369
		.3353	3291
•			~.3251
		.3250	3226
		.3277	3152
		.3233	3469
	210.000 -	.3248	3586
			3556
			3499
		3226	~.3542
		.3228	3439
	330.000 -	3398	3383
ALPHA ( 2) =291 BETA ( 1) = -3.997	RADIUS .000 FHI	.333	.667
			3525
	30.000 -	3415	3683
•			3446
			3562
	129.000 -		3513
	150.000		3519
	20		3618
			3544
			3317
			3325
	210.000	3179	3290
	225.999	3157	
	249.999	פמפת.	3322
	279.999	3297	3419
	300.000	3277	3395

339.999

ORIGINAL FAGE.

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1345

# ARC11-0141A19 OTS+STRUT SRB-OFF MTS-OFF ET BASE

(REUIOS)

SE

# DEPENDENT VARIABLE CP

3001134 ( 170	- DASE				RELEGIZATION AND	findic co		
ALFHA ( 2) =	177	BETA	( 2) :	.016	RADIUS Phi	.000	.333	. 667
					.000	-,3989	3080	3123
					30,000		3143	3293
					60.000		3117	3201
					90.000		3155	3341
					120.000		3125	3177
					135.000		3139	3132
					150.000		3115	3132
					165,000	•	3951	3094
					180,000		-,3982	2985
					195.000		3973	3244
					210.000		-,3999	3354
					225.990		3102	3318
					249.999		בפפפ.	3271
					270.000		3937	3293
					399.999		2950	3081
					330.000		3949	3189
ALPHA ( 2) =	366	BETA	(3)	= 4.931	RADIUS	. 999	.333	.667
					FHI			
					בפפ.	3271	3313	3465
					30.000		3265	3591
					60.000		3291	~.3512
					90.000		3219	3394
				*	120,000		3131	3309
					135.000		3176	3244
					150.000		3191	3252
					165.000		3169	3252
					180.999		3246	3158
		*			195.000		3305	3555
					210.000		3346	3633
					225,000		3496	3545
					249.000		.0000	3548
					270.000		3453	3593
					300.000		3429	3437
					339.999		3319	3620
ALPHA ( 3) =	3.849	BETA	(1)	.023	RADIUS PHI	.999	.333	.667
					.000	3099	3039	3137
					30.000		3155	3367
					60.000		3167	3170
					בכם. כפ		3187	3287
·					129.999		-,3154	3286
					135.999		3181	3258
					150.000	•	3159	3261
					165.999		3098	3295
					190.000		3117	3197
					195.000		3095	3291

DRIGINAL FACE IS

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ET BASE

(ED103)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

330.000

.333 .667 ALPHA ( 3) = 3.845 BETA ( 1) = .003 RADIUS .000 PHI -.3088 -.3342 210.000 225.000 -.3114 -.3329 .0000 -.3251 249.999 -.3044 -.3242 270.000 -.2993 -.3079 300.000 -.3029 -.3355

ORIGINAL FACE IS 1000 FOOR QUALITY

DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1347

ARC11-0141A19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REUIO4) ( 04 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRF = 976.0000 IN. XT YMRF = .0000 IN. YT ZMRF = 400.0000 IN. ZT			ELV-IB = RUDDER = GIMBAL =	8.999 ELV-08 = .999 MACH = 1.999	4.009 1.409
SECTION ( 1) ET BASE	DEPENDENT V	ARIABLE CP				
ALPHA ( 1) = -3.906 BETA	ecc. = (1) FHI	.000 .	333 .667			
	.000	2909	2897 -,2819			
	30,000		29813152			
	60.000		29103025			
	99,999		29073091			
	120,000	<b></b>	28713165			i
	135,000	<b></b>	29113142			
	150.000		28963360			
	165.000		28563221			
	180.000	;	29132890			
	195.090	:	29363079		•	
	210.090		29253139			
	225.000		29313981			•
	249:000		00002997			
	279.000		28412943			
	300,000		27822837			
	330.000	2	28462831			
ALFHA ( 2) =204 BETA	FHI		.667			
	.000		27492732			
	30.000		27342816			
	62.020		39232814			
	. 90,000		28592960			
	120.000		27913310			
•	135.000		28163166			
	150.000		2797 - 3270			
	165.993		27153073		•	
	180.000		27152765			
	195,000		7062659			
•	210,000		6942661	•		
	225.000		26452711			
	240.000		00002918		•	
	270,000		25702842			
	- 300,000		7142850		•	
	330.000	2	718 - 2855			

# ARC11-0141A19 OTS+STRUT SRB-OFF MB-OFF ET BASE

(REU104)

SECTION ( S) ET BASE	DEPENDENT VARIABLE C	P
ALPHA ( 2) = -,306 BETA ( 2) = .016	RADIUS .000 PHI	.333 .667
	.0002580	25522557
	30.000	25952696
	60,000	25372636
	90.000	26402820
	120.999	26492798
	135.000	26972769
	150.000	26902763
	165.000	25192724
	180,999	26572693
•	195.000	26202755
	219.999	26482909
	225.000	26332976
	249.000	.00002895
•	270,000	25682756
	300.000	24862654
	330.000	25142667
ALPHA (2) =26 BETA (3) = 4.031	EADTIN GOD	277
ACCOM C 41	RADIUS .000 PHI	.333 .667
	.0002738	27322686
	30.000	27112745
	69,999	27192805
	90.000	26322767
	120.000	25882727
	135.090	26412671
•	159,000	26752732
	165.000	26552770
	180.000	27332653
	195.000	27302952
	219.999	27693056
	225.900	27983102
	249.999	.00003239
•	270,000	28672924
	300.000	27982804
•	330.000	27112824
ALPHA ( 3) = 4.392 BETA ( 1) = .012	RADIUS .000	.333 .667
	PHI .	
	.0002433	22162541
	30.000	23812393
	60.000	24422450
	99.000	24522523
	129.999	24722472
	135,000	24552531
	150.000	24552626
	165.000	-,23942509
	189.999	24252382
	195.000	24152543





SATE 95 MAY 75

TABULATED SOURCE FRESSURE DATA - TATE ( ARC 11-014 )

FAGE 1349

ARC11-914TA19 OFS+STRUT SRB-OFF WES-OFF ET BASE

(REUID4)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) =	4.392	BETA	(.1) =	.912	RADIUS PHI	.000	.333	.667
					210,000 225,000		2410	
					240.000	÷		2838 2693
					279,999 399,999		2427 2356	2597 2376
					330.000			2574

# (REUIDS) (. D4. FEB. 75. ).

PARAMETRIC DATA

#### REFERENCE DATA

# SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT ELV-IB = 8.000 ELV-OB = 4.000 LREF = 1290.3000 IN. YMRF = .0000 IN. YT RUDDER = .000 MACH = .900 BREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT GIMBAL = 1.000

# SECTION ( 1) ET BASE

SCALE =

bese.

#### DEFENDENT VARIABLE CF

ALPHA (1) = -4.119 BETA (1) =906  RADIUS .900 .333 .667  PHI .900379139143921 30.00037733959 90.00037753958 90.00037753564 120.00037753564 150.00037753564 150.00037053576 165.00037053577 195.00037984149 225.00037984149 225.00037983982 240.00037933882 330.00037963892 330.00038763892 330.00038763892 330.00038713871 66.00038913873 120.00038913873 120.00038913873 120.00038913873 135.00038913873 120.00038913873 120.00038913873 120.00038913873 120.00038913873 120.00038913893 120.00038913893 120.00038913893 120.00038913893 120.00038913893 120.00038913893 120.00038913893 120.00038913893 120.00038913893 120.00038913893 120.00038933793 120.00038933793 135.00038933793 135.00038933793 135.00038933793 135.00038933793 135.00038933793 135.00038933793 135.00038933793 135.00038933893 165.000038933893 165.000038933893 165.000038933893 165.00003893389	SECTION ( 1) ET BASE	DEI-FURENT ANGTABLE CH	
30.00039143998 60.00037733959 90.00037753959 90.00037553938 120.000360137753564 150.00037033398 165.00036583356 180.00037023576 180.00037503957 195.00037503957 210.00037984149 225.00038123983 240.00038123983 240.0003763892 300.0003763892 300.0003763892 300.0003763892 300.0003763892 300.00037733892 300.00039183941 300.00039183941 300.00039183941 300.00038193773 135.00037923606 150.00037923606 150.00037943563 165.000379236614 195.00038203774 301.00038713614 195.00038213943 301.00039433945 225.00039773923	ALPHA (1) = -4.119 BETA (1) =006	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.667
60.00037733959 90.00037253838 120.00038013773 135.00037733564 150.00037033564 150.00037023576 150.00037023577 195.00037503957 210.00038123983 240.00038123983 240.00038123983 240.00038123983 240.00038763892 300.00037763892 300.00037763892 300.00038794070  ALPHA (2) =306 BETA (1) = -4.000 RADIUS .000 .3333 .667 PHI	•		3921
69.90037733959 99.90037253838 129.90037253838 129.90037753564 159.90037753564 159.90037033398 165.90036583356 189.90037023577 195.90037594149 225.90037984149 225.90037763892 309.90037763892 309.90037763892 309.90038794070  ALPHA (2) =306 BETA (1) = -4.900 RADIUS .000 .3333 .667 PHI			3998
120,00039013793 135,00037753564 150,00037033356 165,00037023577 195,00037703577 195,00037503957 210,00037503957 210,00037784149 225,00038123983 240,00039763892 309,00037763892 309,00037763892 309,00037763892 309,00037753892 309,00037763892 309,00038794070  ALPHA (2) =396 BETA (1) = -4.000 RACTUS .000 .333 .667 PHI			3959
135.00037753564 150.00037033398 165.00036583356 180.00037503577 195.00037503577 195.00037703577 210.00037703983 240.00039123983 240.00039113892 309.00037763892 309.00038794070  ALPHA (2) =306 BETA (1) = -4.000 RAGIUS .000 .3333 .667 PHI		90.000372	5 - 3838
135.90037753564 150.00037033398 165.00036583356 180.00037023577 195.00037503957 210.00037984149 225.00038123983 240.00037763892 309.00037763892 309.00038794070  ALPHA (2) =396 BETA (1) = -4.000 RACIUS .000 .3333 .667 PHI	•	120,000380	r3793
165.00036583356 180.00037023577 195.00037503957 210.00037984149 225.00038123983 240.00037763892 370.00037763892 370.00037763892 370.00038794070  ALPHA (2) =306 BETA (1) = -4.000 RADIUS .000 .333 .667 PHI .000391839003734 30.000391839003734 30.00038533793 90.00038043941 120.00038193773 135.00037043632 150.00037043632 180.00039433945 225.00039433945 225.00039773923			
199.00037923577 195.00037503957 210.00037984149 225.00038123983 240.00000003951 270.00037763892 309.00037733892 309.00038794070  ALPHA (2) =306 BETA (1) = -4.000 RAGIUS .000 .333 .667 FHI		150.000370	
180.000			8 -,3356
210.00037984149 225.00038123983 240.000 .00003951 270.00037763892 300.00037933892 300.00038794970  ALPHA (2) =306 BETA (1) = -4.000 RADTUS .000 .333 .667 FHT .000391839803734 30.000391839803734 30.00038533793 90.00038533793 90.00038043941 120.00038693773 135.00037923606 150.00037923606 150.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923			23577
210.00037984149 225.00038123983 240.000 .00003951 270.00037763892 300.00037933892 330.00038794070  ALPHA (2) =306 BETA (1) = -4.000 RACTUS .000 .333 .667 PHI .000391839803734 30.000391839803734 30.00038533793 90.00038533793 90.00038193773 135.00038193773 135.00037923606 150.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923		195.000375	- 3957
240.000 .00003951 270.00037763892 300.00037933082 330.00038794070  ALPHA (2) =306 BETA (1) = -4.000 RADIUS .000 .333 .667  FHI .000391839803734 30.00039713871 60.00038533793 90.00038043941 120.00038193773 135.00037923606 150.00037043632 180.00038713614 195.00039203976 210.00039433945 225.00039773923			
270.00037763892 300.00037933692 330.00038794070  ALPHA (2) =306 BETA (1) = -4.000 RADIUS .000 .333 .667 FHI  .000391839803734 30.00039713871 60.00038533793 90.00038043941 120.00038193773 135.00037923606 150.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923		225.000381	_
309.00037933892 330.00038794970 ALPHA (2) =306 BETA (1) = -4.000 RADIUS .000 .333 .667 FHI .000391839803734 30.00039713871 60.00038533793 90.00038193773 120.00038193773 135.00038193773 135.00037923606 150.00037943632 180.00038713614 195.00039433945 225.00039773923 240.000 .00038713621		2491.999 .999	
ALPHA (2) =306 BETA (1) = -4.000 RADIUS .000 .333 .667  PHT  .000391839803734  30.00039713871  60.00038533793  90.00038643941  120.00038693773  135.00037923606  150.00037943632  180.00038713614  195.00039433945  225.00039773923  240.000 .00038713621		270.000377	
ALPHA (2) =306 BETA (1) = -4.000 RACTUS .000 .333 .667  PHI  .000391839803734 30.00038713871 60.00038533793 90.00038193773 135.00037923606 150.00037923663 165.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923		309.000379	
PHI		330.000387	94979
.000391839803734 30.00039713871 60.00038533793 90.00038643941 120.00038193773 135.00037923606 150.00037923632 180.00037943632 180.00039703976 210.00039433945 225.00039773923	ALPHA (2) =306 BETA (1) = -4.000		.667
30,000 -3971 -3871 60,000 -3853 -3793 90,000 -3864 -3941 120,000 -3819 -3773 135,000 -3792 -3606 150,000 -3799 -3563 165,000 -3704 -3632 180,000 -3871 -3614 195,000 -3920 -3976 210,000 -3943 -3945 225,000 -3977 -3923			D3734
60,000 -3853 -3793 90,000 -3804 -3941 120,000 -3819 -3773 135,000 -3792 -3606 150,000 -3794 -3632 180,000 -3871 -3614 195,000 -3920 -3976 210,000 -3943 -3945 225,000 -3977 -3923	•		
90.00038043941 120.00038193773 135.00037923606 150.00037993663 165.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923			33.793
120.00038193773 135.00037923606 150.00037893563 165.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923 240.000 .00003821		== :	43941
135.00037923606. 150.00037893563 165.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923 240.000 .00003921	•		9:3773
150.00037893563 165.00037943632 180.00038713614 195.00039203976 210.00039433945 225.00039773923 240.000 .00003821			23696.
165.00037943632 180.00038713614 195.00039293976 210.00039433945 225.00039773923 240.000 .00003821			93563
180,00038713614 195,00039203976 210,00039433945 225,00039773923 240,000 .00003821	•	- · · · · · · · · · · · · · · · · · · ·	43632
195,00039293976 210,00039433945 225,00039773923 240,000 .0003821			13614
210.00039453945 225.00039773923 240.000 .0003821			93976
225.00039773923 240.000 .00093921			3 - 3945
240.000 .00003821	·		73923
			9 - 3921
270.00039483741	•		83741
300.00039583955			93955
330.00039873953			373953

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# ARC11-014TA19 OTS+STRUT SRB-NOM NES-NOM ET BASE

(REUIDS)

	WCI I-DIAINIE OL	ואייאי-פאל וסגובינ	A-2-IA'M EL DYZE
SECTION ( 1)ET BASE	DEFENDENT VA	RIABLE CP	
ALPHA ( 2) =264 BETA ( 2) =	.016 RADIUS PHI	.000 ,333	.667
•	.000	37723883	3762
	30.000	3865	4918
	60,000	3812	
	200.00	3833	3909
	120.000	3776	
	135.000	3680	
	150,000	~.3651	3473
	165.000	3657	3352
	180,000	-,3629	3539
•	195.000	3792	3954
	219.999	3812	4934
· .	225.000	3782	4012
	240.000	.0000	3917
	279,999	3847	3846
	300.000	3871	3839
	330.000	3926	3957
ALPHA ( 2) =346 BETA ( 3) = 4	.028 RADIUS PHI	.999 .333	.667
•	.000	38363974	4247
•	39.999	3921	4305
	69.999	-,4142	-,4269
	90.000	4158	3626
	120.000	3999	~.3690
	135.000	4941	3640
	150,000	4144	3755
	165.999	-,4987	3918
	180.999	3713	4251
	195.000	3782	4432
	219.999	3838	4560
	225.000	3912	4367
	249.999	.0000	4289
	270,999	3822	4275
•	300.000	3933	4136
	339.000	4134	4221
ALPHA (3) = 3.924 BETA (1) =	.900 RADIUS PHI	.999 .333	.667
•		36883786	3525
	39,999	3784	3798
	69.999	3698	3647
	90.000	3645	3739
	120.000	3570	3691
	135,000	3546	3579
	150.000	3508	3514
	165.000	3467	3437
• '	189,999	3628	3263
	105.555	7,3023	3004

195.000

-.3683 -.3581

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# ARC11-014TA19 OTS+STRUT SRB-NOW MES-NOW ET BASE

(REUIDS)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA (	(3) =	3.924	BETA	(1) =	.000	RADIUS PHI	.000	.333	.667
						• • •			2074
						210.000		~.3754	38/1
		• .				225,000		3732	3827
						240,000		במפמי.	3639
						270,000		3927	3571
						399.999		3796	3481
						330.000		3847	3699

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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1353

4,999

1.100

ARCS 1-0141A19 OTS+STRUT SRB-NOW HES-NOW ET BASE

(REUIDS) ( D4 FEB 75 )

#### REFERENCE DATA

# FARAMETRIC DATA

# 8C-VJ3 CCC.8

SREF LREF BREF SCAL	F	: :	129	020.0 025.0 025.0 020.	ם נו פ	N.	Υ	(MCP MCP MCP	=		76.9999 2000, 00	IN.	ÝŤ						ELV-18 RUDDER GIMBAL	=	8,00 00 1,00	13	EL MA
SEC	CTI	ON	( 1	ET B	ase						DEF	ENDEN	it va	RIABL	E CF								
ALF	HA	( 1	) :=	-4.9	74	BETA	ţ	1)	= .	.00	2	RAS PH3	eurc I	.0	ככו	.333	.667						
													מפפ	3	1904	3953	~.396	8					
												30.	000			4017	413	9					
												60.	ספפ.			-,3952	425	9					
												99.	ממם.			3956	425	1			<u>س</u> کی		
												129.	ככם.			3928	397	4			ORIGINAL PAGE IS		
												135.	ככת			3948					7 5		
												159.				3899	389	3			93		
												165.	ככפ			3869					ŎZ.		
												180.	בכפפ			3892					ED E		
												195.				3921				Æ	5 C		
												210.				3963				Č	7 70		
												225.				3989				2	i jA		
												249.					4241			-			
												270.				3987				H	4-3		
												399.				3890				3	65		
												339.	נמיני			3875	4913	5					
ALFH	łĀ	( 5	) =	39	96	BETA	(	1)	= -4	.003	;	RAD PHI		.0	99	.333	.667						
													מפפ	3	830	3926	-,4982	?					
												39.	000			3917	4987	•					
											•	60.				3937							
		• •										90.	פפפ			3972							
		•										129.				3921	3995	<b>;</b>					
				•			•					135.	פפפ			3948						•	
												150.				3943	4237						
												165.				3849	4183	;			•		
												180.	מממ			3813	3996	;					
												195.	פמפ			3756	3894						
												210.	מממ			3739	3895						
												225.				3769	3875						
												240.	מפת			ממממי	3990						
												270.9	ממנ			3863	4001					٠.	
-												300.5	200			3941	4098						
												330 .					4071						

ARC11-0141A19 OTS+STRUT SRB-NOW MES-NOW ET BASE

(REUIDS)

SECTION ( 1) ET BASE	DEPENDENT VART	ABLE CF		
ALPHA ( 2) =408 BETA ( 2) = .009	RADIUS Fhi	.000	.333	. 667
		3476	3646	3759
	30.000	•	3699	~.3891
	60.000		3711	3961
	ece, ce		3725	3951
	120,000		3624	3751
	135,000		3620	3593
	150.000		3585	3534
	165.000		3487	3496
•	180,000		3525	3454
	195.000		3522	3696
	210,000		~.3548	3742
	225.000		3573	3757
	249.999		בספס.	3774
	270.000		3528	3843
	300.000		3553	3913
	339.999		-,3600	3804
ALFHA ( 2) =339 BETA ( 3) = 4.928	RADIUS PHI	,000	.333	.667
		3852	3915	3994
	30.000		-,3913	3999
	60,000		3924	4962
	90.000		3938	4949
	120.000		3739	3865
	135.000		3756	3825
	150,000		3744	3996
	165.000		3697	3927
	180,000		3909	3799
	195,000		3851	4102
	210.000		3922	4239
	225.000		3972	-,4097
	240.000		כמפמ	4029
	270,000		3982	3994
·	399.999		3962	3943
	330,000		3923	4914
ALPHA (3) = 3.984 9ETA (1) = .903	RADIUS Phi	.000	.333	.667
	.000	3722	3737	3837
	30.000		3825	4027
•	60.000		3819	3948
	90.000		3926	4000
	120,000		3745	3895
	135,000		3765	3741
	150.000		3725	3695
	165.999		3554	- 3667
	180.000		3597	3624
	195.993		3593	3911



DATE DS MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

330.000

PAGE 1355

# ARC11-014TA19 OTS+STRUT SRB-NOW MES-NOW ET BASE

-.3667 -.3882

(REUIDS)

SECTION ( 1) ET BASE		DEPENDENT VARIABLE CP						
ALPHA (3) = 3.984 BETA (1) =	<b>.</b> 003	RADIUS Phi	מממ.	.333	.667			
		219.999		3712	3893			
		225.990		3725	3820			
		249.999		ממממ.	3819			
		270.000		3662	3846			
		300.000		3620	3749			

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4.999

1.259

ARC11-014TA19 OTS+STRUT SEB-NOM NES-NOM ET BASE

(REU107) ( 04 FEB 75 )

ELV-08 =

MACH =

FARAMETRIC DATA

8,000

.ססס

1,000

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT TY WI CCCC. YMRF = LREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT BREF = 1290.3000 IN.

SCALE = .0200

SECTION ( 1)ET	BASE					DEPENDENT V	AR TABLE CF			
ALPHA ( 1) = -4	4.131	BETA	(1)	=	.003	radius Phi	מפת,	.333	.567	
						.999	2874	2880	-,2929	
				•		39,000		2976	3142	
						60.000		2979		
						90.000	3	2986	3196	
						129.999	)	2997	2964	
						135,990	)	2917	2910	
						150.000	)	2920	2854	
						165.000	}	2871	2826	
						180.000	3	2887	2776	
						195.000	3	2877	3936	
						210.000	3	2877	3110	
						225.00	3	2873	3100	
					•	240.000	3	ככככ.	3047	
						270.000	3	2826	3026	
						399,999	כ	2790	2956	
						330.000	כ	2825	2920	
ALPHA ( 2) =	390	BETA	(1)	= -	-4 ,999	RADIUS PHI	e <b>000.</b>	.333	.667	
						.000	2799	2870	2929	
						30.00	3		3939	
						60.009	3 -		2877	
						ימת. מפ	3		2970	
						120,000	כ	2853		
						135.00	ם ב	2889		
						1 50 . 009	ס	2864		
						165.993		2739		
	•		•			189.999	D .	2724	<del>-</del>	
	٠.					195.999			2900	
						210.00		2666		
	-					225.99		2798		
						249.00		.סססס		
	-					270,009	9	2751	-,2859	

300.000 330,000

-.2798 -.2840

-.2812 -.2971

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ELV-IB =

RUDDER =

GIMBAL =

120.000

135,000

159.999

165.000

180.000

195,500

-.2731 -.2859

-.2759 -.2834

-.2749 -.2825

-.2678 -.2785

-.2725 -.2676

-.2693 -.2890

**FAGE 1357** 

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ARC11-014TA19 OTS+STRUT SRB-NON NPS-NON ET BASE

(REUIDT)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

N_PHA	( 3	) =	3.582	BETA	( t) = .003	radius Phi	.000	.333	.667
						219,000		- ,2701	2918
						225,000		2725	-,2902
						249.999		מממת.	2842
				•		270.000		2662	2811
						300.000		2571	2651
						330.000		2597	2935

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#### TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1359

BASE TE MON-STA MON-BPS TUPTE+STO PLATFIC-110PA

(REU108) ( 04 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRR = 976.0000 IN. 1 YMRR = .0000 IN. 1 ZMRR = 400.0000 IN. 7	rT i		ELV-18 = 8.000 RUODER = .000 GIMBAL = 1.000	MACH = 1.490
SECTION ( 1)ET BASE	DEFENDEN	VARIABLE CP	•		
ALPHA ( 1) = -4.017 BETA	(1) = .006	t <b>us .000. 3</b> 01	.667		
		000212420	1622092	ي	, <u> </u>
	. 39.0		272246	£2.	$\widetilde{\mathcal{L}}$
	60.0		122198	70	77
	9.00		642298	Q /	<del>S</del>
	120.0		432198	<i>₹ 5</i> .	7
	135.0		482179	5	<del>.</del>
	150.0		372205	2	
	165.0		122167	OF POOR QUALITY	
	189.0	-	332094	E P	
	195.0		182340	河田	
	210.0		282340	7 5	
	225.0		442238	92	
	240.0	·	002190		
	270.0		922164		
	300.0		562100		
	330.0		372142		
ALPHA ( 2) =48 BETA	(1) = -4.999 RADI	US .000 .33	3 .667		
	e.	00213221	812080		
	30.0		422193		
	60.0		442199	•	
	99.0	99220	642341	•	
	120.0	9922:	112619		
	135.0		772516		
	150.0		292653		
	165.0		392381		
•	180.0	206	542214	•	

-.2059 -.2201

-.2073 -.2119

-.2073 -.2145

.0000 -.2137

-.2057 -.2162

-.2095 -.2156

-.2105 -.2164

195.000

210.000

225.000

249,993

270.000

300,000

330.000

(REUIDS)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

2501134 ( 1)1	F1 5435							
ALPHA ( 2) =	438	BETA	(2) =	.016	radius Phi	.000	.335	.667
					ממם,	2035	1978	1944
					30.000	•===	2051	2196
					60,000		-,2041	2115
					90.000		-,2056	2217
					120,000		-,2050	2109
					135,000		2084	2989
					150.000		2059	-,2060
					165,999		2010	2044
					180,000		2040	1951
					195.000		2052	2223
					210.000		2052	2299
					225.000		2068	2228
			*		249.999		.0000	2163
					279,009		- 2020	2172
					300.000		1926	2024
					339.999		1950	2049
ALPHA ( 2) =	456	BETA	(3) =	4.928	RADIUS	,999	.333	.667
					FHI			
					,000	2199	2237	2120
					30.000		2109	2129
					69.999		2062	2125
					90.000		2050	2112
					120.000		2099	
					135.999		2149	2159
					150.090		2134	2229
			•		165.000		2199	2154
					189.000		2173	2098
					195.000		2191	2449
					219.999		2196	2624
					225.000		2251	2645
					249.000		.0000	2698
					279.999		2392	2494
					300.000		2291	2273
					339,999		-,2223	2278
ALFHA ( 3) =	4.914	BETA	( 1) =	.009	RADIUS Phi	.999	.333	.667
					.000	2543	1870	
			•		39,999		1995	1942
					60.000		2033	
					90.000		2023	2027
					129.999		1974	1977
					135,000		2026	1995
					150.000		2001	2007
					165.000		-,1945	1959
					180,000		1984	1879
_					195,000		1970	2192
•					•			



DATE DS MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1361

ARC11-0141419 OTS+STRUT SRB-NON MPS-NON ET BASE

(REU108)

SECTION ( 1) ET BASE ...

# DEPENDENT VARIABLE CP

ALPHA ( 3) =	4.014 8	ETA (1) =	.009	RADIUS Phi	בככ.	.333	.667
				219.999		1955	2219
		•		225.000		-,2010	2273
				240:000		.0000	2177
				270,000		2009	2090
				300.000		1934	1942
				330,000		1913	1959

1.5

# ARC11-014TA19 OTS+STRUT SRB-LOW MFS-NOM ET BASE

(REUID9) ( D4 FEB 75 )

PARAMETRIC DATA

# REFERENCE DATA

4,999 8.000 ELV-08 = ELV-IB = SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT ב HACH בפפ RUDDER = TY .NT CCCC. = 95MY LREF = 1290.3000 IN. 1.000 GIMBAL = ZMRP = 400,0000 IN. ZT BREF = 1290.3000 IN. SCALE = .0200

SECTION ( 1) ET BASE	DEPENDENT VARIABLE CE		
ALPHA (1) = -4.191 BETA (1) = .000	RADIUS .000 PHI	.333	.667
	.0003614	~.3609	-,3859
	30,000	3674	4943
	60,000	3788	3923
	90.000	3899	3759
	120,999	3799	~.3853
•	135.000	3718	3591
•	150,000	5702	5288
	165,000	3652	3317
		3514	3487
	195,990	3556	3968
	219.999	3628	4137
	225.000	3692	3918
•	249.000	.0000	3899
	279.900	3566	3843
	300,000	~.3692	3891
	330,000	3560	3841
ALPHA ( 2) =430 BETA ( 1) = -4.999	RADIUS .000 PHI	. 333	.667
	.0003798	3841	3659
	39.999	~.3838	3896
	60.000 🐬	3795	3795
	90 <b>.000</b>	3754	3836
	120.999	3651	3665
	135.000	3676	3531
	159.999	3667	3477
	165.990	3575	3451
	180.000	3742	3484
	195.000	3732	3943
	210.000	3744	3944
	225.990	3749	3712
	240.000	כמפפ.	3688
	270,000	3762	3556
	300.000	3824	3657
	330.000	-:3786	3766

## ARC11-0141A19 OTS+STRUT SRB-LOW HES-NOW ET BASE

(REU109)

SECTION ( 1) ET BAS	E			DEPENDENT VA	RIABLE C	3		
ALPHA ( 2) =525	BETA	(5) =	003	RADIUS PHI	.999	.333	. 667	
				.000	3577	3494	3222	
				30.000	-13311	3495	3671	
				62.000		3389	3437	•
• -				90.000		3295	3748	
				120.000		-,3217	3637	
				135.000		3241	3545	
				150.000			3273	
				165.000		3178	3224	20
				180,000		- 3384	3196	OF POOR QUAL
				195.000		3426	3546	POOR
•				210.000		3394	3685	88
				225.000		3385	3472	$\widetilde{\mathcal{H}}\widetilde{A}$
				240,000		.0000	3387	
				270.000				110 14
				300,000		3496	3411	J.A.
				339.000		3368	3284	
				225.000		3394	3423	CE
ALPHA ( 2) =44	BETA	( 3) =	4.025	RADIUS	. 000	.333	.667	ALLI' SI EL
				PHI				
				.000	3748	3636	3496	
•				30.000		3664	3626	
				60.000		3567	3649	
				90.000		3500	3438	
				129.999		3482	3561	
				135.990		3614	3719	
	•			150.000		3575	3793	
		•		165,000		3613	3954	
				189.999		3785	~.3861	
				195.000		3834	~.3952	
				219.999		3767	3994	
				225.000		3741	3781	
				249.999		.0000	3690	
	•			279,999		3713	3614	
				300.000			3582	
				330.000		3684	3897	
ALPHA ( 3) = 4.050	BETA	(1) =	.996	RADIUS PHI	.000	.333	.667	
				,999	3354	3399	3103	
				30.000	-	-	3467	
				60,000		3379	3392	
				90,000			3645	
				120.000			3546	
				135.000			3361	
				150.000			3238	
				165.999			3185	
				180.000				
		• •		195.000			~.3049	
				193,003		3349	3437	

nger Ly

ARC11-014TA19	OTS+STRUT	SSB-LOW	MES-NAM	ET BAG	ŧ.
J. 1	71313116	343-774	M-2-14-14	21 04:	э.

~ (REU!09)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) :	4.050	BETA	( t) =	.006	radius Phi	.סמם.	.333	.667
					219.000		3368	3581
					225.000	•	3362	3315
•					249.999		,0000	3273
					270,000		3336	3315
					מממ, ממכ		3314	3129
					330,000		3411	3279

ORIGINAL PAGE IN

4.000

1.100

# ARC11-0141A19 OTS+STRUT SRB-LOW NPS-NOM ET BASE

(REU110) ( D4 FEB 75 )

MACH

## REFERENCE DATA

#### SREF = 2690.0000 \$0.FT. LREF = 1290.3000 in. זא. אז פפפס. זא. אז פפפס. SREF = 1290,3000 IN. SCALE = .0200 ZMRP = 400,0000 IN. ZT

#### ELV-IB = RUDDER & .000

SECTION ( 1) ET BASE

## DEPENDENT VARIABLE CO

ALFHA (1) = -3.978 BETA (1) =006	RADIUS PHI	כפפ.	.333	.667
	פספ.	4966	4106	4111
	39,000		4157	4300
	60.000		4093	4495
	90.000		4094	4473
	129.000		4073	4173
	135.000		~.4983	4124
	159.999		4067	4122
	165.000		4003	4084
	189.999		- 4076	3954
r	195.000		~.4085	4253
	210.000		4129	4251
	225.000		4169	4352
	249.999		.0000	4415
	270.000		4187	4380
	300.000		4034	4244
	330.000		4012	4158
ALPHA ( 2) =387 BETA ( 1) = -4.003	radius Phi	.000	.333	.667
	.999	4977	4159	4395
	30.000		4150	4350
	60.000		4196	4254
	90.000		4221	4349
	120 , 000		4136	4219
	135.000		4176	~.4306
	150.000		4173	4453
•	165.999		4935	4352
	189.000		4019	4138
	195.000		3986	4156 -
	210.000		3963	~.4145
	225.909		4993	4989
	249.999		- פפפפי	4984
	270.000		4077	4251
	300,000	•	4183	4316
	330.000			4311

DE POOR QUALITY

PARAMETRIC DATA

1.000

(=)

## ARC11-D141A19 DTS+STRUT SRB-LOW MPS-NOM ET BASE

(REUI10)

1 ) NCITOSE	) €	.†	BASE
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#### DEPENDENT VARIABLE CP

SECTION   THE BASE		DEPENDENT VA	RIABLE C	9	
ALPHA (2) =429 BETA (2) =	.209	RADIUS FHI	.000	.333	. 667
		.000	3623	3794	3929
		30,000		3846	4983
		60.000		3861	4130
		פבפ. בפ		3873	4166
		120.000		3817	3947
		135,999		3821	3758
		150.000		3748	3796
		165.000		3665	3669
		180,999		3688	3693
		195.000		3696	3842
		219.999		3694	3909
		225.000		3734	3944
•		249.999		.0000	4993
		270.000		3792	- 4021
		200,000		3744	4195
		339.999		3771	3959
ALPHA ( 2) =384 BETA ( 3) =	4.928	RADIUS PHI	,000	.333	.667
		. 999	3959	4961	4203
		39,009		4985	4233
		69.999		4092	4266
		90.000		4923	4192
•		129.990		3915	3969
•		135.990			3959
		150.000		3913	4016
		165.000		3998	4051
		189.999		3944	3972
		195.000		-,3991	4345
		219.999		4080	4451
		225.000		4096	4319
		249.999			4294
		270.000		4128	4217
		300,000		4122	4188
		339.999		-,4091	4254
ALPHA (3) = 3.930 BETA (1) =	.999	RADIUS PHI	.999	.333	.667
		.009	3934	3956	4134
		39.999		4965	4396
		60.000		4944	4242
		99.999			4244
		120.000		3995	4941
		135.999		4925	3995
		150.000		3985	3929
•		165.000		3912	3900
		189.000		3934	3894
		195.000		3931	41 43

SI EDVI TONESTA

_	-	•	£	9

DATE DS MAY 75	TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-01-
2416 52 341 12	190004159 330/CF 145330/C 0414 - 1413 / 94C 11-31

ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOM ET BASE

(REU110)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.933	BETA	(-1) =	.000	radius Phi	ממפ.	.333	.667
			•		210.000		3919	4168
					225,990		~.3968	4132
					249.000		פכפפ.	4986
					270,000		3894	4156
					300.000		3847	4939
					330.000		3996	4119

OP POOR QUALITY OF POOR PAGE IS ARC11-0141A19 OTS+STRUT SRB-LOW MPS-NOM ET BASE (REUI11) ( 04 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMQF = 976.0000 IN. XT YMQF =		ELV-IB = 8.000 RUDCER = .000 GIMBAL = 1.000	ELV-08 = 4.000 MACH = 1.250
SECTION ( 1) ET BASE	DEFENDENT VAR	TABLE CP		
ALFHA ( 1) = -4.746 BETA	(1) = .006 RADIUS FHI	.999 .333 .667		
	.000	309031523224		
	30,090	32303494		
	60.000	32173327		
	90.000	31893383		
	120.000	31243188		e.
	135.993	31413121		
	150.000	31283052		
	165.000	30593043		
	180.000	39872991		
	195.000	30843303		
• "	210.000	30953399		
	225.000	31143374		
	240.000	.00003300		
	270.900	39823297		
	300.000	39653242		
	330.000	31983174		
ALPHA ( 2) =444 BETA	(1) = -4'.999 RADIUS	.909 .333 .667		
	.999	303530423168		
	30.000	30263292		
	60.000	30893065	•	
•	90,000	31513172		
	120.000	30973199		•
	135.999	31273239		
•	159.000	31003405		
	165.993	30093288		
	180.999	29753130		
	195,000	28923095		
	210.900	29023036	•	
٠	225.000	29053057		
	249.999	.99993917		
	270.000	29633081		
•	300.000	29803054		
· · · · · · · · · · · · · · · · · · ·		29813159	•	

FAGE 1369

## ET BASE

(REUIII)

	ARC11-0141A19 OTS+STRUT SRB-LIDW MES-NOW	Ε
SECTION ( 1) ET BASE	DEPENDENT VARIABLE CP	
ALFHA ( 2) =402 BETA ( 2) = .01	2 RADIUS .000 .333 .667	
	PHI .	
	.000283328452896	,
	39.99928913945	
•	60.00028732977	
	90.00029123102	
	120.00028562932	
	135.00028812887	
	150.00028792846	
	165.00028152816	
	180.00028202733	
	195,000 -,28463038	
	210.00028473075	
	225.99028813951	
•	240.000 .00003020	
	279.99928983951	
	300.00027482950	
	330.00028232974	
ALPHA ( 2) =324 SETA ( 3) = 4.034	MARYIN MAN AND	
1004	9 7ADIUS 1888 1887 .567 PHI	
	.000297130013163 30.00029583130	
	00.000	
•	100 000	
	435 800	
	4TD DDG	
	12027 12020	
	400 000	
	107.000	
	745.4 19991	
	201 con	
	0.0 000	
	070 000	
	300 000	
	339.0993933297	
	=15,535 -1,5231	
EDD, = (1) AT38 \$23.5 = (5) AH914	RADIUS .000 .333 .667	
	PHI	
	.000288428062885	
	30.00029023084	
	60.00029072904	
	99.000 ~.29543055	
	120,00028983039	
	135.00029312976	
	150.00029182979	
	165.00028562956	
•	180.00029582825	
	195.00028403070	

-.2849 -.3979

ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOW ET BASE

(REUI11)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CF

ALPHA (3) =	5.552	BETA	(1) =	.003	RADĪUS Phī	.000	.333	.667
					210.000		2833	3193
					225.000		2860	3067
					249.999		.0000	3009
					270.000		2801	-,3000
					300.000		2741	2823
			,		330,000		2774	~.3973

DATE OS MAY 75

TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-914 )

PAGE 1371

## ARC11-014TA19 OTS+STRUT SRB-LOW MFS-NOM ET BASE

(REUI12) ( 04 FEB 75 )

#### REFERENCE DATA

## PARAMETRIC DATA

KELEKURCE ON				
SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRF = 976.0000 IN. XT YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT		ELV-IB = 8.000 RUDDER = .000 GIMBAL = 1.000	MACH = 1.400
SECTION ( 1) ET BASE	DEFENDENT VARIABLE CP			
ALPHA ( 1) = -4.122 BETA	000. 201US 000. = (1)	.333 .667		. •
	.0002426 30,000	23672421 23952529 24242597		

	(TIT)			
	פפפ,	2426	2367	2421
	30.000		2395	2529
	60.000		2424	2597
	90,000		2466	2596
	129.999		2479	2545
÷ .	135.000		2487	~.2565
	159.999		2499	2500
	165.000		2446	2461
	180.000		2433	2463
	195,000		2426	2679
	210.000		2499	2698
	225.000		2429	2598
	249.999		.0000	2537
	270.000		2387	2499
	399.000		~.2333	2432
	330.000		2347	2440
		39.000 69.000 90.000 129.000 135.000 150.000 165.000 180.000 210.000 225.000 240.000 270.000	.9922426 39.000 69.000 129.000 135.900 150.000 165.000 180.000 210.000 225.900 240.000 300.000	. 90024262367 30.0002395 60.0002424 90.0002466 120.0002470 135.0002487 150.0002499 165.0002446 180.0002446 180.0002446 210.0002426 210.0002426 210.0002429 225.0002429 240.0002429 240.0002387 300.0002387

ALPHA (	5)	=	39	BETA	{ 1	)	=	-4.993	radius Phi	.909	.333	
									.000	2375	2386	

PHI			
כפפ.	2375	2386	2333
39.993		2383	2434
60.000		2418	2418
90.000		2483	2583
120.000		2422	2843
135.000		2429	2719
150.000		2366	2877
165.990		2397	2645
180.000		2326	2398
195.000		2394	2344
210.000		2277	2339
225.000		2298	2356
240,000		.0000	2429
270.000		2233	2389
300,000		2293	2422
330.000		2319	2450

## ARC11-014TA19 OTS+STRUT SRB-LOW MFS-NOW ET BASE

-.2124 -.2146 -.2154 -.2076

-.2173 -.2413

165,000 180,000 195,000 (REU112)

				AR	11-2141413		(0-654	. 3 .131
SECTION ( 1)E	T BASE			DEPENDENT VAR	TABLE CF			
ALPHA ( 2) =	378	BETA	. (2) =	.006	RADIUS PHI	.000	.333	. 667
					.000	-,2239	2196	2166
					30.000		2249	-,2395
					60.000		2230	2311
					בכם. מפ		2399	2497
					120,000		2285	2374
					135.000		2312	-,2334
					150.000		2398	2292
					165.000		2258	2260
					180,000		2256	2205
					195.000		2253	2409
					219,999		2266	2527
					225.000		2309	2599
					240.000		.0000	2433
			•		270,999		2219	2409
					399,999		2136	2277
			•		330.000		2177	2250
ALPHA ( 2) =	31	BETA	(3) =	4.025	RADIUS	.000	.333	.667
					PHI			
•					,999	2383	2364	2338
			5 -		30.000		2316	2397
					69.999		2273	2367
					90.000		2225	2335
					120,000		2237	2379
					135.000		2285	2379
					150.000		2322	2425
					165.000		2274	2419
					180.000		2361	2274
					195,000		2365	2614
					219.999		2399	2784
					225.000			2823
				•	240.000		.0000	
					270.000		2593 2474	2569 2440
,					399.999 339.999		2367	2445
•					550,000		2367	2443
ALPHA ( 3) =	4.005	BETA	(1)=	.000	RADIUS	.999	.333	.667
					PHI	64.5	6070	0000
					.000	2194	2979	2259
					30.000		-,2254	2139
					60.000		2298	- '2225
					90.000		-,2225	2244
					129,999		2182	2182
•				,	135,000		2191	2222
					150.000		2191	2295

ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOW ET BASE

(REUI12)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CF

ALPHA ( 3) = 4.00\$ BETA ( 1) =	.000	RADIUS PHI	.000	.333	.667
		210.000		2184	2390
		225.000		2209	2545
		249.000		בכככ.	2415
		270,000		2210	2281
		300.000		2119	2152
		330.000		-,2109	2178



#### ARC11-014TA19 OTS+STRUT SRB-NON NES-OFF ET BASE

(REU113) ( 04 FEB 75 )

FARAMETRIC DATA

#### REFERENCE DATA

 SREF
 =
 2690.0000 SQ.FT.
 XMRP
 =
 976.0000 IN. XT

 LREF
 =
 1290.3000 IN.
 YMRP
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN.
 ZMRP
 =
 400.0000 IN. ZT

 ELV-IB = 8.000 ELV-08 = 4.000 YMRP = .0000 IN. YT ZMRP = 400,000 IN. ZT RUDDER = ,000 MACH = .900 GIMBAL = 1.000 SCALE = .0200

ALPHA (1) = -4.119 BETA (1) =903  RADIUS	SECT	ION ( 1)E	BASE					DEFENDENT VARIABLE CF				
### ### ##############################	ALPHA	(1) = -	4.119	BETA	(1)	=	993		.000	.333	.667	
### ### ##############################								.000	3418	3659	3777	
60.99036993774 99.00037153407 120.00036383385 135.00036013157 150.00035403056 165.90035473024 180.00035473024 180.00035473024 180.00034663744 195.00034643744 210.00034743942 225.00035413890 240.000 .000035773754 300.00035713890 240.000 .000035613821 330.00035613821 330.00035633841 60.000359336043752 30.00035633841 60.00035633841 60.00035633841 60.00035633841 60.00035633561 120.00035643752 90.00036093561 120.00035693561 120.000359335693561 120.00035693561 120.00035693561 120.00035693561 120.00035693561 120.00035693561 120.00035693561 120.00035693561 120.00035693561 120.00035693560 120.000035693560 120.000035693560 120.000035693560 120.000035693560 120.000035693560 120.000035693560 120.000035693560 120.000035693560 120.000035603								30,000		3657	3869	
120.00036383385 135.00036013157 150.00035403056 165.00035473024 180.00035473024 180.00035463748 195.00035463744 210.00035413890 240.00035413890 240.00035513890 240.00035773754 300.00035813821 330.00036493903  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .3333 .667 PHI								60.000				
120.00036383385 135.00036013157 150.00035403056 165.00035473024 180.00033643448 195.00034463764 210.00035473942 225.00035413890 240.00035613890 240.00035613890 270.00035773754 300.00035813821 330.00036493903  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .3333 .667 PHI .000359336043752 30.00035363841 60.00035363841 60.00035523722 90.00036093561 120.00035623722 90.00035623722 90.00035633847 150.00035623281 180.00035623281 180.00035623281 180.00035623281 180.000356435693915 210.00035603917 225.00035603917 225.000356035723838 240.000 .00003729 270.00036323729 300.00036323729								90.000			3497	
150.00035403024 165.00035473024 180.00035643744 195.00034463784 210.00034463784 210.00034473942 225.00035413890 240.000 .000035773754 300.00035773754 300.00035813821 330.00035813821 300.00035813821 300.00035643903  ALPHA (2) =390 BETA (1) = -3.997 RADIUS .000 .3333 .667 PHI .000359336043752 30.000359336043752 30.00035603561 120.00035603561 120.00035603561 120.00035603561 120.00035603561 120.00035643366 135.00035643366 135.00035643366 135.00035643566 135.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643566 136.00035643576 225.00035643779 225.00035643779 236.00035643779 236.00035643779 236.00035623988								120,000		3638	3385	
150.00035403056 165.00035473024 180.00035463448 195.00034463784 210.00034463784 210.00034473942 225.00035413890 240.000 .00003808 270.00035773754 300.00035813821 330.00036493903  ALPHA (2) = -390 BETA (1) = -3.997								135,000		3601	3157	
180.00033643448 195.00034463784 210.00034463784 220.00035413890 240.000 .000035413890 270.00035773754 300.00035813821 330.00036493903  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .333 .667 PHI .00035363841 60.00035363841 60.00036323722 90.00036093561 120.00035523520 120.00035623281 180.00035623281 180.000356035443546 195.000356035603546 195.000356035603546 195.000356035603546 195.000356035603546 195.000356035603546 195.000356035603546 195.0003560356035603560 120.0003560356035603560 120.000356035								150,000		3543		
180.00033643448 195.00034463784 210.00034743942 225.00035413890 240.00035773754 300.00035813821 330.00036493903  ALPHA (2) =390 BETA (1) = -3.997  ALPHA (2) =390 BETA (1) = -3.997  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .333 .667 PHI												
195,000 -,3446 -,3794 210,000 -,3474 -,3942 225,000 -,3541 -,3890 240,000 -,000 -,3577 -,3754 300,000 -,3581 -,3821 330,000 -,3581 -,3821 330,000 -,3649 -,3903  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .333 .667  FHI								180.000				
210.00034743942 225.00035413890 240.000 .00003608 270.00035773754 300.00035813821 330.00035913821 330.00036493903  ALPHA (2) =390 BETA (1) = -3.997  ALPHA (2) =390 BETA (1) =3907  ALPHA												
225.00035413890 240.000 .00003608 270.00035773754 300.00035813821 330.00036493903  ALPHA (2) =390 BETA (1) = -3.997  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .3333 .667  PHI .000359336043752 30.00035363841 60.00036323722 90.00036093561 120.00035943561 120.00035943547 150.00035943546 195.00035623281 180.00035623281 180.00035693915 210.00035693915 210.00035803917 225.00035803917 225.00035803917 225.00036403709 300.00036403709 300.00036403709												
240,000 .0003808 270,00035773754 300,00035813821 330,00036493903  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .333 .667  PHI							•					
270.00035773754 300.00035813621 330.00036493903  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .333 .667  PHI												
300,00035813821 330,00036493903  ALPHA (2) =390 BETA (1) = -3.997  RADIUS .000 .333 .667  PHI											-	
350,000 -,3649 -,3903  ALPHA (2) =390 BETA (1) = -3.997  ALPHA (2) =3903  ALPHA (												
FHI  .000359336043752 30.00035363841 60.00036323722 90.00036093561 120.00035173428 135.00035943547 150.00036723320 165.00035623281 180.00035643546 195.00035693915 210.00035803915 225.00035523838 240.00035523838 240.00035603729 270.00036403729 270.00036323898		,						330,000				
37.00035363841 60.00036323722 90.00036093561 120.00035173428 135.00035943547 150.00036723320 165.00035623281 180.00035643546 195.00035693915 210.00035693915 210.00035803917 225.00035523838 240.00035643729 270.00036403729 270.00036323898	ALPHA	(2)=	. 390	BETA	( 1)	= -	3.997		.000	. 333	.667	
30.00035363841 60.00036323722 90.00036093561 120.00035173428 135.00035943347 150.00036723320 165.00035623281 180.00035643546 195.00035693915 210.00035693915 210.00035803917 225.00035523838 240.00035643729 270.00036403729 270.00036323898			•					.000	-,3593	3604	3752	
60,00036323722 90,00036093561 120,00035173428 135,00035943547 130,00036723320 165,00035623281 180,00035443546 195,00035693915 210,00035803917 225,00035523838 240,00035523838 240,00035403729 270,00036323898			•			•		30.000		3536		
99.000 -,3609 -,3561 120.000 -,3517 -,3428 135.000 -,3594 -,3347 130.000 -,3672 -,3320 155.000 -,3562 -,3281 180.000 -,3564 -,3546 195.000 -,3569 -,3915 210.000 -,3580 -,3917 225.000 -,3552 -,3838 240.000 -,0000 -,3729 270.000 -,3640 -,3709 300.000 -,3632 -,3898		•										
120.00035173428 135.00035943347 130.00036723320 155.00035623281 180.00035643546 180.00035643546 195.00035693915 210.00035803917 225.00035523838 240.000 .00003729 270.00036403709 300.00036323898												
135.00035943347 150.00036723320 165.00035623281 180.00035443546 195.00035693915 210.00035803917 225.00035523838 240.000 .00003729 270.00036403709 300.00036323998												
150.00036723320 165.00035623281 180.00035443546 195.00035693915 210.00035803917 225.00035523838 240.000 .00003729 270.00036403709 300.00036323898								135,000				
165,000 -,3562 -,3281 180,000 -,3544 -,3546 195,000 -,3569 -,3915 210,000 -,3580 -,3917 225,000 -,3552 -,3838 240,000 .0000 -,3729 270,000 -,3632 -,3709 300,000 -,3632 -,3998												
180,00035443546 195,00035693915 210,00035803917 225,00035523838 240,000 .00003729 270,00036403709 300,00036323898												
195.00035693915 210.00035803917 225.00035523838 240.000 .00003729 270.00036403709 300.00036323898		•										
210.00035803917 225.00035523838 240.000 .00003729 270.00036403709 300.00036323898								195,000		-		
225.00035523838 240.000 .00003729 270.00036403709 300.00036323898												
240.000 .00003729 270.00035403709 300.00036323898												
270.00035403709 300.00036323998												
300.00036323898												
								330.000				

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## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1375

 	 	598-174	 	 4146	

(REUI13)

							AR	11-014TA19 OT	S+STRUT S	4 PCV-89.	ifs-off E	7 BASE		(35011
SECTI	ON (	1)	ET BASE					DEPENDENT VA	RIABLE CO	•				
ALPHA	( 2)	=	378	BETA	( 2)	=	.016	RADIUS PHI	ככם.	.333	.667			
								.000	-,3360	3444	3265			
				<b>-</b>				30,000			3481			
								60,000			3295			
								90.000			3418			
								120.000			3359			^
								135.000			3188			- P
								150.000			3045			by !
								165.000			2942			ဝိန်
								180,000			3027			₽ 5
								195.000			3519			₹ 🔊
								210.000			3663			60 K4
								225,000			3594			Z 1.0.
								240.000			3456			
								270.000			3374			AH
								300.000			3350			- Fa
								339.000			3474			F POOR QUALITY
ALPHA	( 2)	=	327	BETA	( 3)	=	4.028	RADIUS	.000	.333	.667			
								PHI		•				
								.000	3492	3616				
								30.000		3661				•
								60.000			3983		•	
								90.000			~.3308			
								120.000			3381			
								135,000			3395			
								150.000			-,3333			
								165.900			3059			
								180.000			- 4080			
								195.000			4159			•
								219.999			~.4240			
								225.000			4135			
								249,999			3952			
								270,000			3934			
								300.000			3851			
								339.000		3545	4921			
ALPHA	(.3)	=	3.999	BETA	(1)	ī	.000	₹ADIUS THE	.000	.333	.657			
								.000	3242	3445	3487			
								30.000	· · · - <del>-</del>		3732			
								60.000			3559			
								מספ. מפ			3334			
								120.000			3232			
								135.000			3127			
								150.000			3011			
								165,000			2912			•

190,000

195,000

-.3174 -.3137

-.3217 -.3628

ARC11-014TA19 OTS+STRUT SRB-NOW MPS-OFF ET BASE

(REUI13)

SECTION ( STET BASE

DEPENDENT VARIABLE CP

ALPHA	(3) =	3.909	BETA	( i) ±	.000	ZUICAȘ IHq	.000	,333	.667
						219.000		3279	3853
						225.000		3382	3771
						240.555		ככככ.	3617
						270,000		~.3356	3545
						300,000		3452	3513
						330.000		- 3456	3654

DATE 05 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

EAGE 1377

4,999

1.199

ARC11-014TA19 OTS+STRUT SRB-NON NES-OFF ET BASE

-.3923 -.4967

-.3952 -.4939

(REU114) ( 04 FEB 75 )

MACH =

#### REFERENCE DATA

#### PARAMETRIC DATA

.000

1.000

8.000 ELV-08 =

SREF	=	2699	בככם.	SG.FT.	XMRP	=	976.000	TX .NI C		•		E	LV-IB	=
REF			.3000	1	YME	=		TY .NI CE					UDDER	
BREF			.3000		ZMRP			D IN. ZT					THEAL	
SCALE			.0200		2							•	£. p./	
SECT	ION	(1)	ET BAS	SE			DE	FENDENT VA	RIABLE CP	i				
ALPHA	(	1) =	-5.142	BETA	(1) =	_	.996	RADIUS	.000	.333	.667			
	•	-						PHI	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		••••			
								.000	3902	3934	3917			
						,		39,999	*****		4118			
								69.000			4128			
								90.000			4220			
								120.000			4931			
								135.990			~.3940			
		٠.						150.000			3887			
								165.000			~.3961			
								180.000			3819			
								195.000		3997	4055			
								210.000		3947	4029			
								225.000		3972	4337			
								249.999		פספפ.	4270			• •
								279.000		3973	4121			
					-			300.000			3992			
								330,000		3876	3963			
ALPHA	( )	s) =	321	BETA	(1) =	-4	.093	RADIUS	.000	. 333	.667			
								PHI	7705	7000				
								.000	3785	3886				
		•						39.999		3873				
								60.000		3917				
•								90,000			4988 3968			
								120.000			4969			
					•			135.000 150.000		3912				
								165.000						
								180.000			4149 3865			
								195.000		3739				
								219.000		3739				
								225.900		3727				
					•			249.999			3839			
								2701000	<u>.</u> .	3941	3976			
								200.000		5341				

300,000 ... 330,000

## ARC11-014TA19 OTS+STRUT SRB-NOM MFS-OFF ET BASE

-.3677 -.3825

(REUI14)

SECTI	œ.	(	1)	ET BASE	Ł				DEPENDENT	VARIABLE C	Ę.		
ALPHA	( 2	2)	=	432	BETA	(	2) <del>-</del>	.016	RADIU Phi	פפפ. פי	.333	. 667	
									מכ.	r3369	3554	3622	
									30.00		3626	3797	
									62.00		3647	3862	
									20.00		3682	3878	
									120.00		3591	3692	
									135.99		3551	~.3515	
									150.00		3509	3465	
									165.00	מנ	3423	-,3422	
									180.00	פו	3431	3491	Æ
									195.00	12	3431	3617	$\mathfrak{S}_{\mathfrak{S}}$
									219.00	io.	3456	3675	L. E
									225.00	rji	3592	3791	<u> </u>
									240.00	10	ממממ.	3775	58
									279.99	מ	3447	3816	A B
									300.00	מו	3466	3867	2
									339.99	מו	3487	3796	<i>P.</i> ,
ALPHA	( 2	2)	=	396	BETA	(	3) =	4.025	RADIU PHI	ccc. a	.333	.667	OF POOR QUALITY
									.00	93779	3830	3938	₹ #:
									30.00		3848	3951	. 05
									69.99		3849	3999	
									99.99	១	3759	3937	
									129,99	מ		3747	
									135.52	0	3672	3728	
									150.00	9	3671	3796	
									165,99	0	3637	3814	
									180.99	0	3720	3707	
									195.00	3	3772	4951	
									210.00	9	3826	4175	
									225.00	3	3865	4007	
									249.00	ס	פפפפ.	3960	
									270.009	0	3899	3933	
•									300.00		3348	3877	
									330.000	1	3841	3990	
ALPHA	( 3	) =	:	3.864	BETA	( 1	) =	.003	RADIUS PHI	2000	.333	.667	
									,000	1 150.	-,3695	_ 3765	
									30.000		3798	3785	
									60.000		3786	3965	
									90.000		3754		
									129.999		3694	3956 3759	
									135,000		3714		•
									150.000		3692	3711	
									165.999		3601	3677	
									180.000		3675	3619	
									105.000	•	=.20/3 7677	3591	

195,000

DATE DS HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1379

ARC11-014TA19 OTS+STRUT SRB-NOW MES-OFF ET BASE

(REUI14)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

V_FHA	( 3) =	3.864	BETA	( 1) =	.003	RADIUS PHI	מפפ.	.333	.667
						210.000		3672	3833
						225.000			3785
						249.999		.0000	~.3756
						270.909		3609	3798
						300.000		~.3557	3667
						330.000		3629	- 3791

4,000

1.259

## ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF ET BASE

.0000 -.2816

-.2739 -.2875 -.2798 -.2846

-.2844 -.2974

(REUE13) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

### PARAMETRIC DATA

200.8 200.

1.000

-	3 3	1299	.0000 .3000 .000 .0200		XMRE XMRE	= = =	976.009 979.009 909.009	IN.	YT				ELV-IB = RUDCEQ = GIMBAL =
SECT	TON	(1)	ET BA	SE			DEI	ENDE	NT VAR	table cp			
ALPHA	. (	1) =	-4.11	3 BETA	(1)=	•	.003	RA! PH	DIUS I	.000	.333	.667	
									.000	2850	2883	2881	
								30	,000		2958	3066	
								60	.000		~.3993	3071	
								90	.999		2973	3121	
								129	פפפ.		2914	2950	
								135	מסמ.		2943	2855	
								150	פפס.		2993	2820	
								165	ספפ.		2848	2794	
								189	.000		2823		٨
								195	. מממ		2824	3020	
			•					219	.000		2826		
								225	. מממ		2846	3056	
								249	.000		במממי.	3018	
								270	.000		2790	3014	
								300	פפס.		2742	2895	
								330	. <b>000</b>		2815	2995	
ALPHA	. (	2) =	-,39	D BETA	( i) :	: -4	ממם.	RA! PH	DIUS I	.000	.333	.667	
									.000	2854	2912	2933	
	•							30	.000		2859	3029	
								60	מממ.		2892	2879	
								90	מממ		2939	2962	
								120	. פכפ		2894	3091	
								135	. פפפ		2916	3097	
			-					150	מממ.		2975	3292	
								165				3135	
								- 1	פפפ			-,2930	
								195			2599	-,2898	
								210				2921	
	•							225				2852	

249,999 279,999

300.000

330.000

THE STATE OF THE PARTY OF THE P

## ARC11-014TA19 OTS+STRUT SRB-NOM MES-OFF ET BASE

(REU115)

SECTION (	1) ET BASE
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DEPENDENT VARIABLE CE

SECTION LITER DAS	16			DEI-EIADEIAI AM-	(INDEC C		
ALPHA ( 2) =36	BETA	(5) =	.012	RADIUS Phi	.000	.333	. 667
				.000	2619	2621	2597
				30.000	-,2015	2656	2804
				60,000		2668	~.2695
				90.000		2664	2869
				120.000		2636	2715
						2660	2678
_				135.000		2617	2659
•				150.000			2636
				165.000		2576	
				180,000		2615	2507
			•	195.900		2616	2724
				210.000		2607	2825
				225.000		2548	2794
				240.000		פפפס.	2779
				270.000		2521	2790
				300.000		2490	2597
				330.000		2563	2718
ALPHA ( 2) =29	4 BETA	(3) =	4.028	RADIUS	,000	.333	.667
				PHI			
		•		בכפי.	2786	2837	2966
				39.000		2788	2953
				69.999		2791	2933
		•		90.999		2746	2874
			•	120.000		2597	2776
				135.000		2742	2709
				150.000		2745	2782
				165.000		2726	2777
				180.999		2755	2767
				195,000		2787	3219
				210.000		2856	3265
				225.000		2929	3186
				249.999		.0000	3182
				270.000		2940	2987
				300.000		2910	2939
				330.000		2846	3148
ALPHA ( 3) = 3.834	BETA	( 1) =	.012	RADIUS FHI	.999	.333	.667
				פספ.	2685	2597	2664
				30,000	. 2.00,	2726	2877
				-			
				60.000		2759	2703
				90.000		2759	2827
				120.000		2711	2861
				135,000		2746	2820
				150.000	:	2735	2842
				165.000		2549	2773
				180.000		2574	2705
				195.999		2571	2877

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ARC11-014TA19 OTS+STRUT SRB-NOW MPS-OFF ET BASE

(REUI15)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

LPHA	( 3	3) =	3.834	BETA	(1)=	.912	RADIUS Phī	.000	.333	.667
							219,999		2646	2919
							225.000		2668	2891
							249.000		בכככם.	2829
				•		,	270,000		2693	2778
				•			300.000		2577	2692
							339.999		2575	2867

ORIGINAL PAGE IS

DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1383

ARC11-014TA19 OTS+STRUT SRB-NOW MES-OFF ET BASE

(REUI16) ( D4 FEB 75 )

#### REFERENCE DATA

### PARAMETRIC DATA

		<i>:</i>							
SREF	=	2690.0000 SQ.FT.	XMRP	=	976.0000 IN. XT	된 V-18 =	8.005	ELV-OB =	4.999
					TY .NI CCCC.			MACH =	
BREF	=	1290.3000 IN.	ZMRF	=	499.0000 IN. ZT	GIMBAL =			••••
SCALE						This is a second of the second			

#### SECTION ( 1)ET BASE

### DEFENDENT VARIABLE CP

SECTION (1)ET BASE	DEFENDENT VAI	RIABLE CP	_		
ALFHA ( 1) = -4.095 BETA ( 1) = .012	RADIÚS PHI	.000	.333	.667	ORIGINAL PAGE IS OF POOR QUALITY
	.000	2240	2172	2204	ŎĦ
	30.000		2232	2356	₽.₹
	60 .000		2253	2330	# JE
•	99.999		2277	2390	æ <u>`</u> `
	120.000		2276	2314	S S
	135.000		2322	2328	
	159.999		2310	2356	H
•	165.000		2262	2321	
	189.099		2249	2255	~ 53
	195,000	•	2248	<i>→.?</i> ,457	
q	210.000		2268	2468	
	225.999		2270	2399	
	240.000		.0000	2316	
· ·	270.000		2212	2392	•
	300.000		2180	2246	
	330.000		2172	2259	
ALPHA ( $2$ ) =393 BETA ( $1$ ) = -4.000	RADIUS	.000	.333	.667	
	PHI	2010	0070		
	.000	-,2218	2232	2158	
	30.000		2256		
	60.000		2272		
	.000,000		2322		
	120.000		2288		
	135.000		-,2275		
	150.000		2235		
	165.000		2170		
	180.000		2148		
•	195.000		2136		
	210.999		2142		•
	225.000		-,2145		
	249.999			2221	
	279.999		2148		
	300.000		2133	2244	
	330.000		2154	2230	

SECTI	Otto 1	41	ET	
25011			C !	DAS!

## DEPENDENT VARIABLE CP

accion i mei mar	DELEGACION AN	KINDIE C	•		
ALFHA ( 2) =291 BETA ( 2) =003	RADÍUS FHI	פפפ.	,333	. 667	
	.000	-,2129	2079	-,2013	
	30.000		2124	2286	
	60,000		2129	2201	
	90.000			2355	
	129,900		-,2148	2251	
	135.000		2181	2212	
	150.000		2154	2176	
	165,000		2115	2136	
	180.000		2156	2085	
	195.000		2135	2327	
	219.999		2133	2396	
	225.000		2166	2365	
	240.000		בפפפ.	2276	
	279,999		2082	2249	
	300.000		2006	2133	
	330.000		2026	2197	
AUPHA ( 2) =318 BETA ( 3) = 4.025	RADIUS	.000	.333	.667	
	FHI				
•	מכס.	2265	2274	2172	
	30.000		2167	2179	
	60.000		2149	2199	
·	90.000		2122	2194	
	120.000		2111	2233	
	135.000		2187	2210	
	150,000		-,2173	2250	
	165.000		2179	2244	
	180.000		2232	2179	
	195.000		2229	2596	
	210.000		2258	~.2690	
•	225.000		2395	2653	
	249.000		.0000	2726	
	279.999 399.999		2381	2455	
•			2347	2323	
	339,000		2263	2325	
ALPHA (3) = 3.861 BETA (1) =006	RADIUS PHI	.099	.333	.667	
	בְּחַת.	2083	1916	2087	
•	39.999		2064	1966	
	60.000		2097	2063	
	90.000		2109	2151	
	120,909		2081	2199	
	135,000		2091	2118	
	150.000			2140	
	165.909		2019	2073	
	180,000			1974	
	195.000		2022	2279	

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DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-914 )

PAGE 1385

## ARC11-0141A19 OTS+STRUT SRB-NOM MPS-OFF ET BASE

SECTIO	N (	15	ET	BA	SE.

## DEPENDENT VARIABLE CF

LEHA	( 3)	±	3.861	BETA	(1) =	006	RADIUS	.ססס	.333	.667
							FHI			
							219.999		2089	~.2273
							225.000		2967	2492
•							240.000		ככספ,	2247
							270,000		-,2938	2145
							300.000		1970	2008
				•			330 000		1945	- 1996

(REU116)

### REFERENCE DATA

## PARAMETRIC DATA

LRE	7	2699.9999 50.FT. 1299.3999 IN. 1299.3999 IN.	YMRE	=	976.0000 IN. XT .0000 IN. YT 400.0000 IN. ZT	ELV-18 = RUDDER = GIMBAL =	8.999 099. 1.999	ELV-08 Mach	4.999 ,999
SCALE	=	.0200							*
					a PRELATE ALL STATE PLAN				

SECTION	(1)	ET BASE					DEPENDENT VAR	TABLE CP			
ALPHA ( 1	1) =	-4.155	BETA	(1)	=	.009	RADIUS Phi	מפס,	.333	.667	
							.000	3413	3429	3514	
							30,000		3414	3684	
		٠.,•					60.000		3490	~.3659	1
							90.000		3417	3712	
							120,000		3380	3796	
							135,000		3476	3365	
							150.000		3356	3297	
							165.000		3277	3219	
							189.999		3350	3269	
*							195,000		3292	3616	
							210.909		3347	3678	
							225.000		3493	3570	
							240.000		.0000	3464	
							270.000		3271	3377	•
							300.000		3336	3523	
							330.000		3342	3668	
ALPHA ( 2	?) =	426	BETA .	(1)	= -	4 , 903	RADIUS PHI	.000	.333	.667	
							.000	3782	3911	3746	,
							30.000		3984	3958	ų
							60.000		3932	~.3827	,
							90.999		3869	3702	
							120.000		3810	3581	
	•		•				135.000		-,3770	3476	
							150.000		₩.3753	3448	
							165,000		3776	3474	
							180.000		3772	3679	
		. •					195,000		3782	4047	
							210.000		3828	4063	
	•						225.000		3850	3808	
							249.999		פפפת.	3776	
		1.					270,999		3873	3646	
							300.000		3943	3766	
							330.000		3944	3891	

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(REU117)

	ARC11-014TA19 C	TS+STRUT SEB-HI ₩S-HI ET BASE	
SECTION ( 1)ET BASE	DEPENDENT V	ARIABLE CF	
ALFHA (2) =447 BETA (2) = .00	9 RADIUS PHI	.999 .333 ,667	
	.990	357136743333	
	30,000	37533793	
	60.000	~.35423566	
•	20.00	35223677	
	120,000	34263641	,
	135.000	34473483	ج.
	159.000	34183354	GG.
	165.000	33473230	QUALITY
. •	189.999	35203287	$\ddot{\mathcal{G}}$
	195.000	34963657	<i>i</i>
	219.999	34813855	· F-4 7
	225.000	35273631	73.
	240.000	.00003526	A 03
	270.000	35523453	
	300.000	36013337	
	330.000	36233441	
ALPHA ( 2) =435 BETA ( 3) = 4.028	RADIUS	.999 .333 .667	
	PHI	.595 .333 .667	
	.000	388339103199	
•	30.000	37993489	
	60.000	35953377	
	90.000	35163427	
•	120.999	35653492	
	135.000	35953658	
	159.999	34753831	
	165,000	34493857	
	180.999	38773585	
	195.000	38633663	
	210.000	38393693	
	225.000	39833579	
	249.999	.99993598	
	279,999	37763285	
•	300,000	38973218	
	330.000	39593497	
AUFHA (3) = 3.935 BETA (1) = .000	RADIUS PHI	.999 .333 .667	
	.999	345836843543	
	30,000	345836843543 37753729	
	69,000	39293644	
	90,000	38963440	
	120.000	37423320	
	135.000	37383231	
	150.000	36783167	
	165.000	36943976	
	180.000	= 3383 = 3477	

165.000 180.000

195.000

-.3383 -.3477

-.3449 -.3881

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ARC11-D14IA19 DTS+STRUT SRB-HI MFS-HI ET BASE .

(REUI17)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CF

ALPHA	( 3) =	3.930	BETA	(1) =	.000	radius Phi	מכפ.	.333	.667
						219,999		3399	3997
						225.000		3539	3748
						249.999		בכפס.	3722
						270.000		-,3611	3645
						300.000		3551	3579
						330,000		- 3630	3677

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137.1	2	 MAY	73

#### TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1389

#### ARC11-014TA19 OTS+STRUT SQB-HT MFS-HT ET BASE

(REUI18) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

#### PARAMETRIC DATA

LREF	=	1290	1.3000	IN.	YMRF	=	.אז פפפפ.	YT				RU	DDER =
BREF	=	1290	בפפנ.ו	IN.	ZWEF	= 49	אז ככככ,כנ	ZT				GI	MBAL =
SCALE	=		במצם.										
SECT	ION	(1)	ET BAS	E			DEFENDE	NT VAR	TABLE CP				
ALPHA	(	1) =	-4.098	BETA	(1) =	.000		RUIG	ຸກກາ	.333	.667	Ä	F BOOD CHARLES
							FH					Į-,	- 5 m
								ממם.	3323	3372	3369	Ç	5 Ë
								ככם.ו		3431		<u>,</u>	2 €
							60	פפפ.ו		3347	3590	27	المستنق ال
							95	פפפ.נ		3364		£	<b>5</b>
								1.000		~.3311		Ĕ	<b>1</b>
							135	תממ.		3339	3339	₽	: 🖰
							159	ממס.ו		3299	3297		1
							165	בפפי.			3260	H	
			,				180	פמפ.ו		3311	3295	K	<b></b>
							195	.000		3359	3596		
							210	.000		3371	3599		
							225	ממם.		3495	3539		
							249	ממפ,ו		.סססם	3550		
							279	תפפי.		3416	3563		
							300	פפפ.ו		3395	3463		
							330	, ספס		3391	~.3431		
ALPHA	( 1	2) =	39t	BETA	(1) =	-4.993	RA PH	DIUS	.999	.333	.667		
								.000	3231	3325	3418		
							39	.999		3283	3431		
							60	פפפ.		3390	3401		
							90	. פפת		3361	3536		
							120	.ooo		3359			
							135	.ססס		3495	~.3549		
					•		1 59	. פפפ		3361	3792		
							165	מפפ.		3267	3578		
							180	.ספפ.		3236	3350		
							. 195	. 999		3185	3309		
							210	מממ.		3169	3356		
								.םפת.		3194	3314	•	
			•					.ספס			3329		
							279	.ססס		3265	3419		
							300	, פפפ		3374	3537		
							339	.000		3366	3499		

4.999 ELV-IB = 8.000 ELV-08 = .000 MACH = 1.100

1.000

## ARC11-0141A19 OTS+STRUT SRB-HI MES-HI ET BASE

-.3290 -.3521

(REUIIS)

						•				
SECTION (	1)E	T BASE					PAY. THECHERE	TABLE CO		•
NLEHA ( 2)	= -	438	BETA	( 2)	=	.009	RADIUS PHI	.ססס	.333	.667
							פכם.	2982	3097	3217
							30.000			3358
		•					60.000		3171	3394
							000.00		3196	3339
							120.000		3195	3179
							135.000		3115	3954
							159.993		3055	3057
							165.000		2999	2965
			•				180,000		2991	2969
							195.000			3232
•							210.000			3255
							225.000			3237
							240.000		.0000	3287
							270.000		2994	3272
							300.000		3004	3395
							339,909		3063	3264
ALPHA ( 2)	=	~.573	BETA	(3)	=	4.028	RADIUS	.000	.333	.667
							FHI			
							פפת.	3944	3167	
							30.000			3391
							60.000			3455
							90.000			3235
							129.990			3120
							135.990			3083
							150.000			3119
							165.000			3162
							180.000			3203
							195.000		-,3070	3490
							210.000		3113	3567
							225.000		3188	3459
							249.999		ממפט.	3340
							270.999		3185	3369
							300.000		3147	3293
							530.900		3145	3492
ALPHA ( 3)	=	3.919	BETA	(1)	=	.000	RADIUS	.999	.333	.557
							FHI			
							.000	3336	3337	
							39,000		3397	3568
							60,000		3380	3494
							כסם, מפ			3564
						•	120.000			3393
							135,000			3339
							150,000			3267
							165.999			3246
							190.000		3300	
							405 000		7200	7501

195.000

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DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

FAGE 1391

ARC11-014TA19 OTS+STRUT SRB-HT MFS-HT ET BASE

(REUI18)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

LPHA ( 3) =	3.915	BETA	(1)=	.000	RADIUS PHI	,000	.333	.657
					210.999		3319	3476
					225.000		3315	3415
					240.000			3386
					270.000		3293	3388
					300.000		3253	3319
					330,000		3297	3468

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ARCTI-DIATATE OTS-STRUT SRB-HT MPS-HT ET BASE

(REUT19) ( D4 FEB 75 )

#### REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0000	XMRP = 976.0000 IN. YMRP = .0000 IN. ZMRP = 400.0000 IN.	YT	•		ELV-18 = RUDDER = GIMBAL =	6.000 ELV-08 = 000 MACH = 1.000	4.099 1.259
SECTION ( 1) ET BASE	DEPENDE	NT VARIABLE CP					
ALPHA ( 1) = -4.185 BETA	(1) =009 RA	coo. suid	.333	.667			
		.0002376	2390	2381			
•		.000		2618			
		.000		2550	÷		
		.000		2545			
•		.500		2413			
		.000		2362		•	
		.000		2394		O =	
		.000		2250		₩2	
		פפס.ו		2258		F 50	
•		. סממ		2513		o £	
		.000		2544		్డ్ ≳	
		.000	2333	2517	· ·	#3 B	
•	240	.000		2458		\$ C	
	270	.000	~.2300	2417		CT TO	
•	300	.909	2242	2381			
	330	. במם	2276	2421			
ALPHA ( 2) =459 BETA	(1) = -4.000 RA	ece. euro. I	.333	.657		ORIGINAL PAGE IS OF POOR QUALLITY	
		.0002320	2391	2419			
	39	.000		2465			
	60	.000	2350	2350			
	90	,900	2363	2365		•	
	120	. ככני	2352	2434			
•	135	ממם.	2378	2518			
•	150	.000	2369	2730			
	165	.000	2260	2639			
	190	.000	2235	2493			
	195	.000	2226	2465			
		.050	2243	2422			
	225	.000	2233	2369			
•	240	.000.	.0000	2273			
			0054	0077			

270.000 300.000

330.000

-.2254 -.2273

-.2289 -.2314 -.2289 -.2454

## ARC11-D14TA19 OTS+STRUT SRB-HT MES-HT ET BASE

-.2250 -.2490

(REUI19)

SECTION ( 1) ET BASE	į		DEPENDENT VA	RIABLE C	<b>,</b>		
LEHA ( 2) =438	BETA ( 2) =	.912	RADIUS PHI	.000	.333	.667	
			.000	2211	2112	2189	
			30.000		2192	2365	
			60.000		2187	2251	
			<b>000.00</b>		2166	2371	
			120.000		2155	2279	
			135.000		2182	2239	
			150.000		2165	2195	
, •			• 165.000		2136	2168	
•		•	189.999		2176	2095	
			. 195,000		2187	2334	
	•		219.999		2186	2339	
			225.000		2209	2309	
	•		240.000		בפפפ.	2285	
			270,000		2142	2264	
			390.999		2195	2138	
			339.000		2131	2311	
LPHA ( 2) =54	BETA ( 3) =	4.928	RADIUS	.000	.333	667	
			PHI				
			.999	2231	2284	2424	
			39.999		2196	2424	
			69.999		2260	2330	
			90.000		2247	2239	
			120.000		2234	2218	
			135.000		2231	2239	
			150.000		2221	2258	
			165,000		2202	2312	
			180 .000		2147	2349	
•			195.000		2160	2679	
			210.000		2240	2775	
			225.000		2291	2709	
			240.000		פמספ.	2666	
			270,000		2281	2437	
			300.000		2278	2333	
			339,999		2286	2532	
LFHA ( 3) = 3.516	BETA ( 1) =	.012	RADIUS PHI	.000	.333	.667	
			.000	2282	2295	2260	
			30.000		2323	2439	
•		•	60.000		2361	2313	
			90.000		2364	2496	
•			120.000		2323	2417	
	,		135.999		2348	2348	
			150.000		2349	-,2395	
			165.000		-,2282	2261	
			180.000		2249	2247	
			40E 000		0000		

195,000

A GO A TANDINO

ARC11-014TA19 OTS+STRUT SRB-HT M-S-HT ET BASE .

-.2190 -.2438

(REUI19)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

330,000

3) =	3,516	BETA (	1) =	.012	RADIUS PHI	פפת.	.333	. 557
					219.000		2248	2466
					225.000		2279	2435
					240.000		ככככ.	2408
	•				270.000		2227	2364
					300,000	•	2190	2293
	3) ±	3) = 3.516	3) = 3.516 BETA (	3) = 3.516 BETA (1) =	3) = 3.516 BETA (1) = .012	PHI 210.000 225.000 240.000 270.000	PHI 210.000 225.000 240.000 270.000	PHI 219.0992248 225.9902279 249.999 .9999 279.0992227



DATE OS HAY 75

LREF = 1290.3000 IN.

TABULATED SOURCE PRESSURE DATA - 1A19 ( ACC 11-014 )

דץ או פפפפ.

PAGE 1395

4.990

1.499

ARC11-0141A19 OTS+STRUT SRB-HI NFS-HI ET BASE

(REU120) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

YMRF =

#### PARAMETRIC DATA

פפפ.

1.000

ELV-IB =

RUDDER =

= 8C-V\_3 CCC.8

	זא. או פפנ זא. או פפנ				GIMBAL =
SCALE = .0200					· · · · · · · · · · · · · · · · · · ·
SECTION ( 1)ET BASE	DEFENDENT VAR	TABLE CP			• •
ALPHA (1) = -4.167 BETA (1) = .003	RADIUS Phi	coo.	.333	.667	
	.000	1754	1695	1602	ORIGINAL PAGE IS OF POOR QUALITY
	30,000		1780	1889	电路
	60,000		1722	1783	77
	90.099		1735	1907	ŎH
	120,000		1711	1839	₽.≥
	135.000		1726	1857	<i>₹</i> 0 <i>}</i>
	150.000		1711	1756	(D)
	165.000		1668	1715	C D
	180.000		1737	1645	
	195,000		1748	1846	日語
	210.000		1746	1882	
	225.000		1746	1739	~ E3
	249.000		כפפפ.	1793	
	270.000		1725	1792	,
	300.000		1690	1668	
	330.000		1654	1797	
ALPHA (2) =489 BETA (1) = -4.003	RADIUS PHI	.999	.333	.667	
	פספ.	1661	1719	1574	
	30.000		1792	1851	
	60.000		1835	1819	
	90.000		1842	1954	
•	120,000		1782	2933	
	135.000		1765	2261	
	150.000		1779	2339	
	165.000		1694	2017	
	180.000		1593	1799	
	195,000		1579	1850	*
	219.009		1576	1787	
	225,000		1613	1742	
	240,000		מפפסי	1656	
	270,000		1559	1632	
	300,000		1554	1638	
	330.000		1590		

(REUIZO)

SECTION.	ı	4127	Riet
3661131			UASE

#### DEPENDENT VARIABLE CP

SECTION ( 4) ET BASE	,	DEPENDENT VARIABLE CP						
ALEHA ( 2) =43E BETA	(2) =	.009	RADIUS PHI	ממם.	.333	. 567		
			מכם.	1584	1533	1455		
			30.000		1696	1863		
			60,000		1514	1746		
			000.00		1635	1739		
			120,000		-,1591	1626		
			135,000		1590	1589		
			150.000		1595	1552		
			165,000		1564	1509		
			180,000		1541	1484		
			195.000		1579	1722		
			219.999		1556	1726		
			225,000		1579	1681		
			249.999		.0000	1545		
			270,000		1553	1644		
			300,000		1499	1523		
			339.999		1472	1557		
ALPHA ( 2) =486 BETA	( 3) =	4.025	RADIUS PHI	.000	.333	.567		
			,000	471%	1770	1665		
		* *	30,000	1113	-,1673	1630		
			69.099		1667	1682		
			200.00		~.1684	1649		
			120.000			1676		
			135.000		1679	1645		
			150.000		1699	1621		
			165.000		1635	1696		
			180.000		1620	1643		
			195.000		1636	1937		
			210.000		1668	2073		
			225.000		1700	2045		
			240,000	•	פפפפ.	2163		
. •			270.000		1838	2008		
	•		300.000		1841	1827		
			339.000		1801	1838		
ALPHA ( 3) = 3.657 BETA	( 1) =	,009	RADIUS Phi	.000	.333	.667		
			.000	1575	1461	1476		
			39.999		1563	1699		
			60,000		1671	1683		
			90,000		1699	1792		
			120.000		1609	1595		
•			135.000		1597	1561		
			150.000		1693	1501		
			165.000		1555	1471		
			190.000	•	1539	1454		
			195.000		1529	1731		

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DATE 05 MAY 75

## TABULATED SURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1397

ARC11-D14TA19 OTS+STRUT SRB-HI M-S-HI ET BASE

(REUI2D)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.5\$7 BETA ( 1) = .009	QD. ZUICAF IHS	.333	.667
	210,000	1543	1739
	225.000	1561	1748
	240.000	מככם.	1792
	270,000	1521	1645
	300.000	1450	1491
	330.000	1433	1441

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ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF ET BASE

(REUT21) ( D4 FEB 75 )

#### REFERENCE DATA

#### FARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	YMRF = TRMY	0900 IN. XT 0900 IN. YT 0900 IN. ZT		·		ELV-IB = RUSSER = GIMBAL =	000.8 000. 000.1	ELV-08 = MACH =	.993 1.499
SECTION ( 1)ET BASE		DEPENDENT VAR	IABLE CF	;					
ALPHA ( 1) = -4.20% BETA	(1) =003	RADIUS PHI	.000	.333	.667				
		.000	2851	~.2896	2881				
•		30,000	12031		3229				
		60.000			3099			*	
		90.000			-,2999			C C	
		129.000			3055			lar E.	
		135.000			3295			4 C	
		150.000			3261			でし	
		165.000			3116				
	-	180.000			3000			e to the tent	
•		195.000			3181				
		210.000			3145			¢	
		225.000		2868	3108				
		249.999		במממ.	3093				
		270.000		2811	3046				
		300.000		2892	2972			·	
		330.000		2945	2946				
ALPHA ( 2) =189 BETA	(1) = -4.999	radius Phi	.000	.333	.667			•	
	•	.000	2744	2764	2768				
		30.000		2894	2924				
•	•	60.000		2871	2859				
		90,000		2939	3059				
		120.000		2925	3146				
		135,999		2947	3045				
		150.000		2873	3127				
		165.000		2798	3191				
	,	180.000		2770	2761				
		195,000		2799	2661				
		219.000		2689	2633				
		225.999		2652					
•		249.990		מככת.	2778				
		270.000		2583	2898				
		399,999		2674					
		330.000		2795	2828				

### TABULATED SOURCE PRESSURE DATA - TAIR ( ARC 11-014 )

FAGE 1399

### ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF ET BASE

(REUI21)

	ARC11-0141A19 OTS+STRUT	SER OFF NES-OFF ET BASE
SECTION ( 1) ET BASE	DEPENDENT VARIABLE CO	
ALPHA ( 2) =291 BETA ( 2) =	RADIUS .000 FHI	.333 .667
	.9992548	25502527
	30.000	25952757
	60.000	25662662
	90.000	- 2631 - 2784
	120.000	26292704
	135.000	26642600
	150.000	26472566
	165.999	25952557
	189,999	26982464
	195.000	25812682
	210.000	25652687
	225.999	25812874
	249.999	.00002760
	270,000	25502715
	399.009	23972602
	339.000	24452558
ALPHA ( 2) =300 BETA ( 3) = 4.		.333 .667
	FHI	
	.0002726	27242751
	30.000	26962797
	60.000	27342879
	90.000	26552765
	120,090	26142745
	135.999	26422663
	150,000	26562680
	165.000	26392754
	180,000	26752627
	195.000	27122859
	210.000	27102941
	225.993	27893116
	240.000	.99993321
	270,000	28712955
	300.000	28142816
	330.000	27442841
ALPHA ( 3) = 3.969 BETA ( 1) = .	CCC. SUIGAR AC	.333 .667
	PHI	
	.0002471	22842525
	30.000	24152460
	60.000	25092499
	99.000	25652584
	120.000	25422562
•	135.000	25992595
	150.000	25872551
	165.000	25302492
	180,000	25312392

195,000

-,2523 -.2647

ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REUI21)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CF

	•							
ALPHA ( 3) =	3.969	BETA	( i) =	.006	RADIUS PHI	.000	.333	.567
					210.000	•	2528	2565
					225.000		2492	2944
•					249.000		בככת.	2698
					270.000		2444	2516
					300.000		2355	2369
					330 000		~ . 2346	- 2409

PAGE 1401

SAR TE MON-27M MON-878 TUFTE+ETO PLATE TO BASE

(REU122) ( 94 FEB 75 )

ELV-QB =

MACH = . 1.400

### REFERENCE DATA

#### PARAMETRIC DATA

6.000

ככם.

REF	=	1290	.3000		XMRF YMRF	=		.0000. 0000.	IN.	ΥT					ELV-1B = RUDDER = GIMBAL =
BREF BCALE			.0200 0050.	IN.	ZMRF	=	400	כממם.	IN.	41					GIMDAL -
SECT	TON	(1)	ET BA	<b>S</b> E				DEF	ENDEN	T VAR	TABLE CF			•	
ALPHA	( :	1) =	-4.16	BETA	(1) =		3CD.			TUS	,000	.333	.667		
									FHI						
										999	2147	2084			
										ממפ		2132			
										פפפ			2202		
										מפס			2309		
									120.	פפפ		2148			
									135.	מפפ			2214		
									150.				2164		
									165.				2118		
									189.				2078		
									195.	מממ			2279		
									210.	מממ			2316		
									225.	מממ		2129	2200		
									240.	מכת.		ממפמי	2155		
									270.	מכפ		2102	2147		
									300.	פפפ		2059	2120		
									339.	מממ	·.	2949	2124		
ALPHA	( :	2) =	34	BETA	(1)	= -3	.997		7 AC	ius	.999	. 333	.667		
			*							999	2110	2178	2064		
									30.	990		2296	2284		
									60.	מממ		2257	2228		
									90.	מממ		2391	2409		
									120.	מממ		2212	2417		
									135.	ממפ		2219	2463		
				•	•				150.	מפפ		2198	2690		
									155.	מפפ		2088	2429		
									180.	מממ		2976	2177		
									195.	מממ		2937	2129		
									210.	000		2942	2067		
						•			225.	פפפ		2050	2074		
					•				249.	ממני		.0000	2195		
									270.	חמח		-12059	2194		
				•					300.	פפפ		2934	2090		
													2400		

### ARCI 1-014TA19 OTS+STRUT SRB-NOW MPS-NOW ET BASE

(REU122)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CF

3201134 ( 1.0) 3/32					SCI CHECH TIN			
ALPHA ( 2) =388	BETA	( 2)	=	\$10.	RADIUS Phi	.000	.333	. 667
	`				מפח.	1974	1945	1957
					30.000		1995	2230
					60,000		1976	-,2141
					ממס, מפ		-,2018	2163
					120,000		2001	2044
					135,000		2008	1991
					150.000		2004	1947
					165.000		1950	1937
					180.000		1971	1857
					195.000		1957	2080
					219.999		1954	2148
					225.000		1989	2196
					249.999		ממפם.	2972
					270.000		1944	2083
					200.000		1867	1971
					330.009		1885	1956
ALPHA ( 2) =522	BETA	( 3)	=	4.031	RADIUS PHI	,000	.333	.667
					.000	2113	2164	2118
					30.000		2965	2042
		•			60,000		2046	2068
					90.000		2006	2030
					129.930		2006	2105
					135.000		2066	2093
					150.000		2935	2112
					165.000		2055	2098
					180.000		2939	2014
	- 1				195,000		2036	2262
					210,999		2193	2417
					225.000		2127	2468
					249.999		כככם.	2567
					270,000		2243	2361
			•		399.999		-,2253	2203
					339.999		2197	2243
ALPHA ( 3) = 3.942	BETA	(1)	=	.012	RADIUS PHI	.000	.333	.667
					.000	1988	1829	1998
					30.000		<b>1967</b>	1952
					69.099		2951	2968
					90.00		2082	2116
					120.000		2000	2020
					135,000		2037	1991
					150.000		2001	1947
					165.000		-,1969	1888
					180.999		1975	1843
					195.993		1994	2125



DATE 93 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

330.000

PAGE 1493

ARC11-014TA19 OTS+STRUT SRB-NOM MES-NOM ET BASE

-.1847 -.1865

(REUIZZ)

SECTION ( 1) ET BASE.	DEPENDENT VARI	ABLE C	3.	
ALFHA ( 3) = 3.942 BETA ( 1) = .012	RADIUS PHI	000	.333	.667
	219,999		1967	2119
	225.000		1992	2264
	240.000		.0000	2143
	270.999		1929	2024
	300.000		- 1876	- 1077

.900

LREF = 1290.3000 IN.

דץ און פפפפ.

ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REU123) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 976.0000 IN. XT

YMRF =

#### PARAMETRIC DATA

פפפ.

1.000

= 8C-VJ3 000.

ELV-IB =

RUDDER =

GIMBAL =

ECTION ( 1)ET BASE	DEFENDENT VAI	RIABLE CF	;	
PHA ( 1) = -4.947 BETA ( 1) = .00	RADIUS PHI	.000	333	.667
	בפפ,	3445	-,3610	3764
•	30,000		3696	3886
	60.000		3660	-,3749
	000,00		3634	3546
	120.000		3591	3570
	135.000		3554	
	150.000		3530	
	165.000		3451	3011
	180.000		3335	3388
	195,000		3436	3823
	210.000		~.3439	3959
	225,000		3499	3792
	249.099		.0000	3711
	270.000		3562	
	399.999		3559	373
	339.999		3559	3852
HA ( 2) =276 BETA ( 1) = -4.99	RADIUS PHI	.022	.333	.657
	.000	3597	3815	3872
			-,3799	
	39,003			
	39.999 69.999		3854	3845
	60.000		3854 3867	
	60.000 60.000		3867	3666
	60.000			3666 3492
	60.000 90,000 120.000		3867 3758	3666 3492 3349
	60.000 90.000 120.000 135.000		3867 3758 3770	3666 3492 3349 3305
	60.000 60.000 120.000 135.000 150.000		3867 3758 3779 3731	3666 3492
	60.000 90.000 120.000 135.000 150.000 165.000		3867 3758 3770 3731 3718 3565	3666 3492 3349 3395 3295
	60.000 90.000 120.000 135.000 150.000 165.000 180.000		3867 3758 3779 3731 3718	3666 3492 3349 3395 3619 3995
	60.000 90.000 120.000 135.000 150.000 165.000 180.000 195.000		3867 3758 3770 3731 3718 3565 3595 3641	3666 3492 3349 3395 3295 3619 3995
	60.000 90.000 120.000 135.000 150.000 165.000 180.000 195.000 210.000		3867 3758 3770 3731 3718 3565 3595 3641 3682	3666 3492 3349 3395 3295
	60.000 90.000 120.000 135.000 150.000 165.000 180.000 195.000		3867 3758 3770 3731 3718 3565 3595 3641 3682	-,3666 -,3492 -,3349 -,3395 -,3619 -,3995 -,4097 -,3850 -,3831
	60.000 90.000 120.000 135.000 150.000 165.000 180.000 195.000 210.000 225.000		3867 3758 3770 3731 3718 3565 3595 3641 3682	-,3666 -,3492 -,3349 -,3395 -,3619 -,3995 -,4097 -,3850 -,3831

ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REU123)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

SECTION ! INC. ONSE							
ALPHA ( 2) =237	BETA	(.2) =	.009	RADIUS	.999	.333	. 667
12.114				FHI			
				פבפ.	3387	3368	2977
				30.000		3411	3378
		•		60,000		3251	3229
				90.000		3171	3521
•			•	120.000		3046	3479
				135.999		3024	3265
				150.000		~.2985	~.3098
				165.909		2995	2967
•				180.000		3245	2798
				195.000		3337	3159
				210.000		3369	3459
				225.000		3396	3286
				240.000		בכככם.	3169
				279.999		3429	3163
				399.999		3390	3091
				339.999		3499	3194
ALPHA ( 2) =195	BETA	(3) =	4.928	RADIUS	, פכפ	.333	.667
ACTUAL VOICE		••		FHI			
1.0				,000	3642	3629	3362
				30.999		3594	3583
				69.999		3475	3438
				90,000		3399	3428
				120.000		3345	3495
				135,990		3276	3623
,				150.000		3196	3777
				165.909		3241	3935
				180.999		3646	3626
				195,000		3577	3491
				210.000		3592	<b></b> 36 <del>69</del>
			•	225,990		3644	3393
				249.999		.0000	3399
				270.000		3616	3321
				300.000		3596	3347
				330.000		3598	3419
ALPHA ( 3) = 3.855	DETA	į 43 ·	= .003	RADIUS	,000	.333	.667
ALTRA ( 3) = 3.003	, uc.1A	. , .,	_ ,,	PHI			
				.000	3360	3505	3227
				30.000		3525	3467
				60.000	•	3477	3420
•				90.000		3371	3439
				129.999		3288	- 3396
				135.000		3324	
•				159.000		3226	
				165.000		3218	
•				189.999		3236	
				195.000		3299	
		-		193.000			

### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ET BASE

(REUI23)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.855	BETA	(1) =	.003	₹ADIUS PHI	.000	.333	.667
					219.999		3387	~.3696
					225.000		3423	3492
•					249.999		.0000	3378
					270.000		3419	3419
					399,695		3497	3341
			•		330.000		3491	3473

FAGE 1407

ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF ET BASE

(REU124) | 04 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

1.9EF =	2699.0000 SQ.FT. 1299.3000 IN. 1299.3000 IN.	YURF =	976,0000 IN. XT TV. NI DECC. TV. VI DECC. DE		ELV-IB = RUDDER = GIMBAL =	.000 .000 1.000	ELV-OB = MACH =	.000 1,190
---------	--	--------	--	--	----------------------------------	-----------------------	--------------------	---------------

### SECTION ( 1) ET BASE

### DEFENDENT VARIABLE CF.

•					
ALPHA (1) = -3.993 BETA (1) = .009	RADIUS PHI	.000	. 333	.667	
	מכם.	4201	4281	4343	
	30,000		4295	4423	
	60.000		4246	4579	ON POOR
	90.000		4265	4596	(F) (S)
	120,999		-,4261	4348	GINAL PAGE IS POOR QUALITY
	135.000		4273	4285	22
	150.000		4245	4219	
	165.000		4178	4192	ے کے
	180.000		4205	4105	<u>و</u> ہے
	195,000		-,4233-	4422	₩ ₩
	210.000		-,4261	4460	(F)
	225.000		4306	4426	
	249.000		.0000	4520	2 2
	270.000		4311	4565	יא ט
	300,000		4222	4429	
	330,000		4197	4346	
ALPHA ( 2) =279 BETA ( 1) = -4.003	RADIUS PHI	.000	.333	.667	
ALPHA ( 2) =279 BETA ( 1) = -4.003		.999 -, 4363	.333	.667 4628	
ALPHA ( 2) =279 BETA ( 1) = -4.003	PHI		~.4469		
ALPHA ( 2) =279 BETA ( 1) = -4.003	PHI .000		~.4469	4628	
ALPHA ( 2) =279 BETA ( 1) = -4.003	PHI .000 30,000		4469 4462	4628 4662	
ALPHA ( 2) =279 BETA ( 1) = -4.003	PHI .000 30,000 60.000		4469 4462 4498	4628 4662 4540	
ALPHA ( 2) =279 BETA ( 1) = -4.003	PHI .000 30,000 60,000 90,000		4469 4462 4488 4544	4628 4662 4540 4593	
ALPHA ( 2) =279 BETA ( 1) = -4.003	PHI .000 30,000 60,000 90,000 120,000		4469 4462 4498 4544 4519	4628 4662 4540 4593 4622	
ALBHA ( 2) =279 BETA ( 1) = -4.003	PHI .000 30,000 60.000 90.000 120.000		4469 4462 4498 4544 4510 4560	4628 4662 4540 4593 4622 4709	
ALBHA ( 2) =279 BETA ( 1) = -4.003	FHI .000 30,000 60,000 90,000 120,000 135,000 150,000		4469 4462 4498 4519 4569 4554	4628 4662 4540 4593 4622 4709 4947	
ALPHA ( 2) =279 BETA ( 1) = -4.003	FHI .000 30,000 60,000 90,000 120,000 135,000 150,000		4469 4462 4498 4544 4510 4560 4554	4628 4662 4540 4593 4622 4709 4947 4940	
ALPHA (2) =279 BETA (1) = -4.003	FHI .000 30,000 60,000 90,000 120,000 135,000 150,000 165,000		4469 4462 4458 4544 4510 4560 4554 4403 4355	4628 4662 4540 4593 4622 4709 4947 4940	
ALPHA (2) =279 BETA (1) = -4.003	PHI .000 30,900 60,000 90,000 120,000 135,000 165,000 160,000 165,000		4469 4462 4498 4544 4510 4560 4554 4403 4355	4628 4662 4540 4593 4622 4709 4947 4940 4294 4452	
ALPHA (2) =279 BETA (1) = -4.003	PHI .000 .50,000 .000 .000 .000 .000 .135.000 .150.000 .165.000 .165.000 .195.000 .210.000		4469 4462 4498 4544 4510 4560 4554 4403 4355 4290 4281	4628 4662 4540 4593 4622 4709 4947 4940 4294 4452 4403	
ALPHA (2) =279 BETA (1) = -4.003	PHI .000 .000 .000 .000 .000 .000 .000 .0		4469 4462 4498 4544 4519 4569 4403 4355 4290 4281 4278	4628 4662 4540 4593 4622 4709 4947 4944 4294 4452 4403 4393	
ALPHA (2) =279 BETA (1) = -4.003	PHI .000 30,900 60,000 90,000 120,000 135,000 150,000 160,000 195,000 210,000 225,000		4469 4462 4498 4544 4519 4554 4493 4355 4290 4281 4278	4628 4662 4540 4593 4622 4709 4947 4944 4294 4452 4403 4393 4393	

· <del>\*\*</del> · ·

135.000

150.000

165.000

189.999

195,000

219.999

225.000

249.999

270,000

195,000

(REU124)

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ET BASE DEPENDENT VARIABLE CP SECTION ( 1) ET BASE RADIUS .333 ALPHA (2) = -.246 BETA (2) = .009 FHI -.3809 -.4034 -.4147 .000 -.4056 -.4259 30.000 60.000 -.4051 -.4295 -.4075 -.4419 90.000 -.4041 -.4196 120.000 135,000 -.4017 -.3961 -.3997 -.3898 150,000 -.3885 -.3867 165.000 -.3994 -.3892 180,000 -.3892 -.3997 195.000 -.3901 -.4114 219.999 -.3929 -.4195 225,000 .0000 -.4182 249.000 -.3929 -.4197 279.999 -.3963 -.4304 300.000 -.3988 -.4171 330.000 ALPHA (2) = -.279 BETA (3) = 4.025 RADIUS .000 .333 .667 FHI . 000 -.4350 -.4387 -.4524 -.4405 -.4563 39.999 -.4410 -.4570 60.000 -.4325 -.4484 90.000 -.4229 -.4317 120,000

ALPHA ( 3) = 3.894 BETA ( 1) = -.993

· F

-.4388 -.4456 300,000 339,000 -.4418 -.4545 .333 .667 .000 RADIUS PHI -.4119 -.4113 -.4288 .000 -,4199 -.4452 30,000 -.4189 -.4376 60.000 מכפ. בפ -.4199 -.4416 -.4138 -.4285 120,000 135,000 -.4165 -.4144 -.4131 -.4077 150.000 -.4964 -.4963 165.000 -.4199 -.3982 180.000

-.4239 -.4271

-.4210 -.4377

-.4184 -.4396

-.4237 -.4229

-.4291 -.4619

-.4347 -.4854

-.4493 -.4548

.0000 -.4483

-.4410 -.4477

-.4985 -.4269

DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

FAGE 1409

ARC11-014TA19 DES+STRUT SRB-OFF MES-OFF ET BASE

(REUI24)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.804 BETA ( 1) = -.003

RADIUS	מממ.	.333	.667
PHI			
210.000		4995	4283
225.990		4195	4253
249.999		.0000	4241
270,000		4956	4279
300.000		4949	4184
330.000		4942	4257

OF POOR QUALITY

1.250

ARC11-0141A19 OTS+STRUT SRB-OFF MS-OFF ET BASE . (REUISS) ( 04 FEB 75 )

### REFERENCE DATA

SREF = 2690,0000 50:FT. XMRF = 976,0000 IN. XT

# FARAMETRIC DATA

1.000

ELV-IB =

RUDDER =

GIMBAL =

= 80-VJ3 000.

.000 MACH =

	1290,3000		YMRF		מממם				
EF =	1290,3000		ZMRF		מפפפ.	IN. ZT			
ALE =	.0200			:		•			
ECTION	( 1)ET BA	st.			DEPE	NDENT VAR	IABLE CP		
PHA (	1) = -3.97	S BETA	(1) =	.003		RADIUS PHI	.000	.333	.667
						.000	3402	3472	3695
	•					30.000		-,3528	3732
			•			60.000		3549	3738
						90.000		3581	3760
						120.000		3515	3514
		•				135.000			3426
						150.000		3477	3361
						165.000		3491	3328
						180.999		3493	3256
						195.000			3496
						210.000		3395	3667
,						225.999		3413	3696
						249.999		.0000	3672
						270.000		3381	3634
						300.000		3389	3557
		•				339.999		3424	3544
PHA (	2) =25	5 BETA	(1) =	-4.000		RADIUS	.999	.333	.667
						FHI			
						.000	3502	3536	
						39.999			3958
						60.000			3722
				•		90.000		3681	
						120.000		3577	
						135.000			3649
	•	•				159.000			3824
						165.993			3775
						180,000			3436
						195,000			3527
						210.000			3496
						225.000	•		3462
•						249.993	•		3471
						270.000		3398	3570
						399,999 339,999			3551 3720

### BASE

				ARC	11-014TA19 OTS	+STRUT ST	B-OFF N	'S-OFF ET
SECTION (	1) ET BASE				DEPENDENT VAR	TABLE CP		
ALPHA ( 2)	=289	BETA	( 2) =	.012	RADIUS Phi	.ccc.	.333	.667
					.999	3167	3193	3277
					30.000		3220	3373
				•	60.000		3219	3394
1					מפפ. מפ		3250	3466
					120,000		3295	3273
	1 1	•			135,000		3238	3203
			*		150,000		3291	3162
					165.000		3152	3144
					180,000		3189	3921
					195.000		3164	3216
					210.000		3142	3393
					225,000		3180	3328
		•			249.000		.0000	3317
					270.000		3146	- <b>.</b> 3339 .
			*		399.999		3984	3192
					330.000		3137	3277
ALPHA ( 2)	=189	BETA	( 3) =	4,031	RADIUS PHI	.999	.333	.667
•					.999	3448	3501	3701
					30,000		3479	3696
					60.000		3491	3639
					90.000		3416	3516
					129,990		3333	3480
•	•				135.000		3387	3431
					159.999		3364	3428
					165.999		3351	3429
					180.000		~.3388	3335
					195,000		3449	3635
					210.000		3497	3797
					225.000		3545	3574
					240.000		.9999	3749
					270.000			3677
				٠.	300.000		3586	3621
					330.000		3514	3874
ALPHA ( 3)	= 4,005	BETA	(1)=	.993	RADIUS FHI	.000	.333	.667
100					.000	3397	3193	3399
					39.999		3338	3518
					60.000		3364	3346
					90.000		3417	3470
	•				120.000		- 3358	3499
					135.000		3385	3443
					150 .000		3392	3374
					165,000		3314	3341
					180.000		3397	3229
	4.5				195.000		3265	3481

FAGE 1411

OF POOR QUALITY

### ARCTI-DIATATO OFS-STRUT SRB-OFF MES-OFF ET BASE

(REU125)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

ALFHA ( 3)	= 4.0	DS BETA	( 1) =	.003	RADIUS PHI	.000	.333	.667
					510.000		3265	3425
					225,000			3588
					240.000		.0000	3429
					270.000		3225	3387
					300.000		3169	3291
					330.000		3177	~.3575

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DATE 03 MAY 75
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# TABULATED SOURCE FRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1413

# ARC11-9141A19 OTS+STRUT SRB-OFF MG-OFF ET BASE

(REU126) ( 04 FEB 75 )

# REFERENCE DATA

### FARAMETRIC DATA

SREF	=	2690,0000 to.FT.	YMDE	_	976.0000 IN. XT				
CHEL	=	1290.3000 IN.	VMCF			ELV-IB =	. ממפ	ELV-08 =	.000
BREF	=	**** *	,	-	490.0000 IN. ZT	RUDDER =	.ססס	MACH =	1.499
SCALE	=	.9299			400100000 1141 71	GIMBAL =	1.000		

## SECTION ( 1)ET BASE

# DEPENDENT VARIABLE CP

ALPHA (1) = -3.909 BETA (1) = .009	RADIUS FHI	.000	.333	.667
	.000	2937	2926	2965
	30,000		3986	3272
	60.000		3057	3155
	99.999		3061	3112
	129.999		3022	3162
	135.000		3974	3183
	159,999		~.3955	3169
	165.000		3007	2984
	180.000		2976	3057
	195,999		2958	3242
	210.000		2946	3191
	225.000		2949	3296
•	249.999		.0000	3197
	270.000		2587	3158
•	300.000		2820	3954
	<b>33</b> 0.000		2992	3035
ALPHA ( 2) =243 BETA ( 1) = -4.000	radius Phi	.000	. 333	.667
	.999	2872	2910	2892
	30.000			2092 3048
	60.000	•	_	2988
	90.000			3154
	120.999			3322
	135.999			3202
	159.999			3219
	165.000			3336
	180.000			2880
	195,000			2758
	210.000			2761
	225.000			2895
	249.999			.2905
	270.000			.2942
•	300,000			.2963
•	330,000	-		.6703

ARCTI-DIATATE OTS+STRUT SRB-OFF MS-OFF ET BASE

(9EUIŻ6)

SECTION ( 1) ET BASE DEF	ENDENT VAR	IABLE CF		
ALFHA (2) =23 BETA (2) = .012	RADIUS PHI	.000	.333	.667
	בכפ.	2696	2728	2714
	30,000		2721	2919
	60,000		2794	2849
	ea.cae		2790	2943
	120,000		2770	2843
	135.000		2798	2725
	150.000		2781	2695
	165.000		2796	2678
	180.000		2738	2586
	195.000		2714	2837
*	210.000		2731	2835
	225.000		2797	3058
	249.999		.0000	2943
	279.999		2698	2882
	399.999		-,2576	2724
	339.999		2598	2710
ALPHA ( 2) =234 BETA ( 3) = 4.931	RADIUS	.000	.333	.667
	PHI	2007	2007	2002
	.000	2895	2887	2892 2877
•	30.000 60.000		2996	3011
	69.999		2925	2952
	90.000		2833 2788	2908
	120.000		2817	2849
	135,990 159,999		2841	2866
· •	165,000		2799	2927
	180,000		-,2856	2754
	195.000		2884	3016
	210.000		2924	3101
	225.000		2965	3304
	240.000		.0000	3518
	270,000		3029	3112
	399,999		-,2985	2964
	339.999		2881	3005
ALPHA ( 3) = 4.047 BETA ( 1) = .006	RADIUS Phi	.999	.333	.667
	.999	2639	-,2452	2756
	39.999		2581	2729
•	60.000		2697	2679
	90. <b>000</b>		2731	2768
	120,000		2711	2716
	135.000		2757	2735
	150.000		+.2779	2649
	165.000		-,2707	2627
	180.000		2667	2564
	195,000		2662	2849



DATE DS HAY 75

## TABULATED SOURCE PRESSURE DATA + TA19 ( ARC 11-014 )

PAGE 1415

### ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ET BASE

(REU126)

SECTION ( 1)ET BASE	•				
AUPHA ( 3) = 4.04 BETA ( 1) =	.006	RADIUS Phi	.000	.333	.667
		210.000	- 1	2673	2739
		225.990		2672	3132
		249,999		ככככ.	2918
		270.000		2637	2701
		300.000		2550	2528
		330.000		2530	2736

ARCI 1-014TA19 OTS+STRUT SRB-NON NES-NOM ET BASE

(REU127) ( 94 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

SREF = 2690.0000 \$0.FT. LREF = 1290.3000 \$N. BREF = 1290.3000 \$N. SCALE = .0200	XMRF = 976.0000 IN. XT YMRF = .0000 IN. YT ZMRF = 490.0000 IN. ZT		ELV-IB = RUDDER = GIMBAL =	= 8C-V40 = HOAP CCC. 1.000	.900. 000.
SECTION ( 1) ET BASE	DEPENDENT VA	RIABLE CF	••	•	
ALPHA ( 1) = -4.125 BETA	(1) = .000 RADIUS	.099 .333 .667			
	.000	388238563925			
	39,099	39284168			
	62.020	39394110			
	coo. ce	-,39793985		•	
	120.000	39193995			
	135.000	38693768			
•	159,999	38963561			
	165.990	37973491			
	180.000	37363691	•		
	195.000	38504130			
	219.999	39424311			
	225.000	39344130			
	249.999	.00004003			
	279.990	39413869			
	300.000	38784991			
**************************************	330,000	39994964			
ALPHA ( 2) =396 BETA	(1) = -4.003 RADIUS PHI	.999 .333 .667			
	.ממם.	392241244197			
	30.000	49484255			
	60,000	49484995			
	90,000	40184047			
	120,000	38963882			
	135.000	39693578	•		
•	150,000	39133536			
	165.990	39093592			
	189.999	39763755			
	195,999	39724225			
	219.999	39644337			
	225.000	39884099			
•	249.993	.0000 - 3989		•	
	270.000	49444997	<b>.</b>		
	300,000	40784139			
	330.000	40764217			
•	44.1444	***** *****			

0

### ET BASE

(REUIZY)

	ARC	11-014TA19 (	STS+STRUT	SEB-NIM	MES-NOW F
SECTION ( 1)ET BASE		DEPENDENT V			
ALGUA ( 9)					•
ALPHA (2) =498 BETA (2) =	.009	RADIUS Phi	.000	.333	. 667
•		, מכת	3736	3728	3583
		30.000		3782	3924
		60,000		3682	3799
		90.000		3641	3978
••		120.000		3627	-,3986
•		135.000		3532	3758
		159.999		3553	-
		165,000		~.3569	3314
		180,000			3401
		195.000		3697	3799
		219,999		3645	
		225.000	•		3827
	•	240,000			3756
		270,000			3668
		300.000		3667	3631
		339.000		3681	3757
ALPHA ( 2) =336 BETA ( 3) =					
ALI-HA ( 2) =336 BETA ( 3) =	4.925	RADIUS	.999	.333	.667
		FHI		7555	.001
		.000	4988	3953	~.3951
		30.999			4154
		60.000			3926
		90,000			3775
		120.000			3909
•		135.993	•		3977
		159,999		_	4141
		165.000		-	3852
		180.000		_	4180
Section 1		195.000			4256
		219.000			4331
		225.000			4158
		249.999			.3997
		270,000			.3985
•		300.000			.3996
		339.999			.4951
LPHA ( 3) = 3.792 BETA ( 1) = -					.4231
	.903	RADIUS PHI	. <b>00</b> 0	.333	.667
			3743 -		
		30,000		_	.3526
		60,000 60,000			.3812
		90,000			.3663
		120.000			3941
					3927
		135,000	• •		3645
		150.000			3554
		165.000	٠,	3492	3459
		180.000	-,	3691	3363
		195.000			7044

-.3655 -.3844

ARC11-014TA19 OTS+STRUT SRB-NO4 MFS-NO4 ET BASE

SECTION ( S)ET BASE

DEPENDENT VARIABLE CF

.333 .667 RADIUS ALPHA ( 3) = 3.792 BETA ( 1) = -.003 FHI -.3705 -.3981 210.000 -.3665 -.3834 225,990 .0000 -.3609 249,999 -.3672 -.3651 270.000 -.3714 -.3613 300.000 -.3748 -.3739 330.000

(REU127)

DATE OS HAY 75

TABULATED SOURCE FRESSURE DATA - 1419 ( ARC 11-D14 )

FAGE 1419

# ARCE 1-914TA19 OTS+STRUT SRB-NOW MES-NOW ET BASE

(REU128) ( 04 FEB 75 )

### REFERENCE DATA

 SREF
 =
 2690.0000 SQ.FT.
 XMRP
 =
 976.0000 IN. XT

 LREF
 =
 1290.3000 IN.
 YMRP
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN.
 ZMRP
 =
 490.0000 IN. ZT

 SCALE
 .0000 IN. ZT

#### FARAMETRIC DATA

ELV-18 = .990 ELV-08 = .990 RUDDER = .990 MACH = 1.190 GINBAL = 1.000

## SECTION ( 1) ET BASE

## DEPENDENT VARIABLE CE

					•			
ALFHA (1)	) = -4.191 ·	BETA	(1) =	.003	RADIUS PHI	.000	.333	.667
					.000	4933	4084	4194
					30.999		4193	
					69.999		4925	
					99.000		4961	
					129.999		4929	
					135.999		4993	
					159.999		3996	3991
					165.993		3952	3960
					180.000		- 3994	3904
					195,000		4009	4199
					219.999		4943	4210
					225.000		4193	4191
					249.999		.9999	4393
					279.000		4109	4286
					399.999		3996	4250
					330.000		4023	4128
ALPHA ( 2)	- 455	00-4					.4565	4120
THE THE CENT	465	SEIA (	1) = -4	.903	RADIUS	,000	.333	.667
					PHI			
		•			.000	3948	4993	4114
					39.000		3977	4145
	4.				60,000		3977	4949
					90.000		- 4953	4129
					120.000		4043	4158
		•			135.000			4427
					150.000			4553
			•		165.000			4355 4486
					180,000			
		•			195,000			3927
					210.000			4572
					225.000			4936
					249.993			3978
					270.000			.3992
	•				300,000			.4133
					330.000			.4191
	•				-30,1000	-	.4954 -	.4086

### ARC11-014TA19 OTS+STRUT SRB-NOW MES-NOW ET BASE

(REUT28)

SECT	131	(	DET	BASE

### DEFENDENT VARIABLE CP

3201134 (	*1.C1 043E					DEI CHACH			
ALPHA ( 2)	=447	BETA	( 5)	=	.912	RADIUS PHI	cco.	.333	.667
						.000	3545	3791	3792
						30.000	,	3708	3983
						60.000		3699	3948
						90.000		3709	3968
						120.000	,	-,3555	3832
• •						135.000		~.3658	3648
	•					150,000		3522	3581
						165.000		3558	3557
•						180.000		3584	3495
	•					195.000		3582	3710
						219.000		3586	3782
						-		3582	3752
						225,000			3799
						240.000		,0000	
						270,000		3572	3842
						300.000		3616	3937
						330.000		3661	3799
ALPHA ( 2)	=495	BETA	( 3)	=	4.031	RADIUS PHI	.000	.333	.667
	• .					.000	3932	4999	4191
						30.000		4010	4966
						60.000		4935	4136
					·	20.000		3967	4069
						120.990		3855	3934
						135.000		3863	3924
						150.000		3837	3983
						165,000		3795	4965
						189,999		3843	3896
						195.900		3916	4223
						219,999		3961	4434
						225.990		3994	4146
						240.000		מפפפ.	4072
-						270,000		3991	4935
						300 .000		3989	~.3977
						339.999		3994	4101
						333,333		5554	
ALPHA ( 3)	= 5,819	BETA	( 1)	=	.009	RADIUS PHI	.999	.333	.667
						.999	3840	3824	3947
						30.000	•	3911	4128
						60.000		3992	4934
						90.000		3937	-,4593
						120.000		3835	-,3961
						135.000		3877	3872
•						150.000		3840	3777
	•					165.000		3757	3757
						180.000		3801	3691
						195.000		3789	-,3963
						* 2 4 1 2 2 3			,,,,,,,



DATE 03 MAY 75

Section & Line of the Control of the

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1421

ARC11-084TA19 OTS+STRUT SRB-NOW MFS-NOW ET BASE

(REUI28)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

ALPHA (	3) =	3.819	BETA	( 1) =	.009	RADIUS	.999	.333	.667
		٠		• *		210.000		~.3894	3995
	•			•		225.000		3811	3992
		44		• .		249.999		.0000	3905
						270,999		3786	3947
						300.000		3740	3846
	· .					330,000		3765	- 3941

.000

1.250

ARCI 1-014TA19 OTS+STRUT SRB-WW MFS-WW ET BASE

(REUI29) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. X4RF = 976.0000 IN. XT

#### PARAMETRIC DATA

1.000

ELV-IB =

RUDDER =

GIMBAL =

= 80-V\_13 000.

.000 MACH =

2455 = 5000 2000 20 cl.		J IN. A'	
REF = 1290.3000 IN.		O IN. YT	
REF = 1290.3000 IN.	ZMRP = 400,000	D IN. ZT	
CALE = .0200	. • .		
SECTION ( 1) ET BASE	. 55	FENDENT WAR TABLE	. <b>СР</b>
LPHA ( 1) = -4.080 BETA	(1) = .996	RADIUS .00 PHI	o .333 .667
		.00028	3628652937
		30,000	29993131
		60.000	29053070
		מכם. מפ	29073076
		129.000	28512936
		135.000	28562817
•		150.000	28412759
		165.000	27752716
	•	180.000	28942693
•		195,000	28042908
		210.000	28973939
	•	225.000	28202982
		240.000	.00002952
•		270.000	27893991
		300.000	27692905
		330,000	28202932
N_PHA ( 2) =379 BETA	(1) = -3.997	RADIUS .00	.333 .667
		PHI	
		.00028	5328792994
		30.000	28903168
		60.000	29492993
		סמם. מפ	29773011
		120.000	29173010
	. •	135.000	29393110
		150.000	29243275
		165.000	28273148
		180.000	27572816
		193,000	27172966
		219.999	27022931
		225.000	27182829
		249.990	.00002783
	, i	270.000	27322843
		300,000	27802821
		330.000	27942970
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

### ARCT1-014TA19 OTS+STRUT SRB-NON MES-NON ET BASE

(REU129)

36	CTI	NC!	(	1)	EŢ	BASE
----	-----	-----	---	----	----	------

#### DEPENDENT VARIABLE CF

SECTION ( 1)ET	BASE			DEPENDENT VA	RIABLE CP		
ALPHA ( 2) =	408 BET	A (2) =	.012	RADIUS	.000	.333	. 667
	•		4	PHI			
				.999	-,2636	2621	2717
				. 30,000		2557	2974
				60,000		2648	2777
				90.000		2686	2873
				129,999		2537	2744
				135.000		2661	2665
		•		150.000		2619	2693
				165.000		2592	2560
				180,000		2514	2492
•				195.000		2605	2693
				219.999		2625	2774
				225.000		2617	2737
•				249.999		מכפפ.	2728
				270,000		2598	2767
	•			300.000		2525	2616
•				330.000		2581	2899
ALPHA ( 2) =	301 BET	A (3) =	4.031	RADIUS	.999	.333	.667
				PHI		***	
				.000	2842	2898	3029
•				30.000		2846	2987
	. •			60.000		2993	2976
				90,000		2825	2892
		•		129.993		2789	2840
				135.000		2778	2891
				150,000		2798	2838
			•	165,000		2744	2817
				189.999		2791	2769
•				195,000		2801	3128
				219.999		2846	3213
				225.000		2888	3050
				249.000		.9999	3949
•				279,999		2957	3916
				300.000	•	2924	2949
•		•		339.999		2905	3157
ALFHA ( 3) = 3,	843 BETA	(1)=	.993	RADIUS PHI	.993	.333	.667
				.999	2734	2624	2713
				30.000	~.2134		2713 2948
2.5				60.000 90.000		2892	~.2896
					•	2832	2895
				129.999		2765	2913
				135,000		2792	2891
	•			150.000		2763	2792
				165.999			2640
				180.000		2715	2618
				195.000		2689	2565

(REUI29)

### ARC11-014TA19 OTS+STRUT SRB-NOW MFS-NOW ET BASE

SECTION ( S)ET BASE .

DEPENDENT VARIABLE CF

ALPHA ( 3) = 3.843 BETA ( 1) = .003	ecc. SUICAP	.333 .667						
	210.000	26732859						
	225,000	26652937						
•	249,999	.00002826						
	279.000	26582893						
	300.000	25702641						
	330 000	2599 - 2994						

PAGE 1425

ARC11-0141A19 OTS+STRUT SRB-NOW MES-NOW ET BASE

(REUI30) ( 04 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT ELV-IB = = 8C-VJ3 CCC. .999 LREF = 1290.3000 IN. YMEF = TY .NI CCCC. . RUDDER = . MACH = 1.499 BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT GIMBAL = 1.000 SCALE =

#### SECTION ( 1) ET BASE

### DEPENDENT VARIABLE CP

ALPHA ( 1) = -4.224 BETA ( 1) = .006	RADIUS FHI	.000	.333	.667	
	.000	2124	~.2079	2134	
	30,000		2132	2341	
	60.000		2142	2243	
	99.999		2179	2397	
	129.999		2122	2215	
	135.000		2155	2155	
	150,000		2142	2988	
	165.000		2114	2071	
	189.999		2093	2072	
	195.000		2195	2273	
	210.000		2088	2344	
	225.000		2099	2231	
	249.999		.0000	2198	
	279.999		2085	2190	
	300.000		2053	2170	
	330.000		2945	2167	
ALPHA ( 2) =444 BETA ( 1) = -3.997	RADIUS PHI	.000	.333	.667	
	.000	2164	2213	- 2162	
	39.999	-,2104	2246	2323	
	60.000		2343	2339	
	90,000		2392	2503 2503	
	120.000		2281	2441	
	135,999		2284	2592	
	150,000		2232	2641	
	165.000		2151	2498	
•	180,000		2170	2253	
	195,000				•
•	210.000		2151	2179	
	225.000		2120	2169	
	249.999		2129	2174	
	249.999 279.999		.0000	2173	
			2072	2229	
	300.000		2123	2225	
	330 .000		2139	2213	

### ARCI 1-014TA19 OTS+STRUT SRB-NOM MES-NOM ET BASE

(REUISO)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

					30, 203200	.(1:,1522 6		
ALPHA ( 2) =	405	BETA	('5) =	.016	RADIUS Fhi	.000	.333	.667
					.000	2071	1989	1973
					39.099	, , , ,	2025	2297
					69.555	•	2012	2173
					90.000		2047	2274
	•				129.000		2025	2119
					135,999		2042	2072
					150.990		2011	2021
					165,000		1992	2002
					180.000		2040	1890
					195.000		2015	2120
					219,099		2017	2217
					225.000		2006	
					240,000			2165 2121
4 4							.0000	
	•				270.000		1978	2177
					300.000		1893	2039
					339.000		1914	2943
ALPHA ( 2) =	360	BETA	( 3) =	4.031	RADIUS PHI	.000	.333	.667
					.000	2164	2174	2147
					30.000		2067	2989
					69.000		2968	2134
					90.000		2027	2161
					120,000		2072	2161
					135.000		2072	2194
					159.000		2071	2112
					165,999		2024	2067
					189.999		2099	2024
					195,000		2074	2293
					219.999		2099	2413
					225.000		2142	2441
					249.999		.0000	2636
					270.000		2280	2388
•					300.000		2222	2240
					330.000		2216	2265
ALPHA ( 3) =	3.819	BETA	(1) =	.009	RADIUS Phi	.993	.333	.667
					.999	2953	1874	2944
	•				30.999		2026	1968
	•				60.000		2112	2080
					90.000		2154	2173
					129,999			2060
	•				135,000	•	2086	2011
					150.000		2050	1958
					165.999			1921
					189.999		1978	1857
					195.990			2162

ARC11-014TA19 OTS+STRUT SRB-NOW MES-NOW ET BASE

(REUISO)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

ALPHA	( 3)	=	3.819	BETA	(1)=	.009	RADIUS Phi	.000	.333	.667
							210.000	•	1999	2147
			100				225.000		2007	2251
							240.000		.0000	2161
							270.000		2003	2044
			•	•			399,999		1911	1998
							330.000		1897	1891

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# ARC11-0141A19 OTS+STRUT SRB-OFF MIS-OFF ET BASE

(REU131) ( 04 FEB 75 .)

### REFERENCE DATA

### - PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. SREF = 1290.3000 IN. SCALE = .0200	YMRP =	1000 IN. XT TY. AI COCK TY. AI COCK			-	ELV-IB = RUDDER = GIMBAL =	2.000 000.2	ELV-OB :		.900 .900
SECTION ( 1) ET BASE	- -	DEPENDENT VA	RIABLE CF	;			•			
ALPHA ( 1) = -4.020 BETA	300. = (1)	RADIUS Phi	.000	.333	.667					
		.000	3394	3590	3614					
		30,000			3865					
		60.000			3722					
		90.000		3468	3529					
		120.000			3566					
		135,000			3277					
•		150.000		3299	3110					
		165.000		3276	30.48	•				
		180.000		~.3330	3219					
e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de		195.000		3354	3623					
•		210.000		3413	3821					
		225.000			3641					
•		240.000			3516					
		270.000			3488			*	•	
		300.000			- 3549					
		330.000		3479	3728					
ALPHA ( 2) =288 BETA	(1) = -4.993	RADIUS Phi	.000	.333	.667			•		
		.000	3567	-,3716	3712					
		39.999		·3728						
		60.000		3697	3798					
•		90.000			3653					
		120.000			3489	•				
		135.000			3329			•		
	*	150.000			3399					
		165.000			3325					
	•	189,999			3599					
		195,000			3845					
•		210.000			3944	•				
		225.000			3724					
		240.993			3625		•	•		
· · · · · · · · · · · · · · · · · · ·		270.000			3635			•		
		300,000			3758					
	•	330.000		3674	3774					
	the state of the s			-						

FAGE 1429

### ARC11-014TA19 OTS+STRUT SRB-OFF MS-OFF ET BASE

(REU131)

SECTIO	ЭN (	1)	ET BASE						DEPENDENT VAR	RIABLE CR	:	
LLPHA	( 2)	=	274	BETA	٠ (	2)	=	.009	RADIUS • PHI	.000	.333	. 667
									.000	3279	3266	2980
•									30.000		3292	-,3333
				,					60,000		3152	3145
				•					90.000		3099	3512
									129,999	•	3059	3416
									135,000		3046	3185
									159.990		2943	2998
				•					165.000		2999	2945
						•			180,000		3149	2797
									195.000		3251	3204
									219.999		~.3394	3449
									225.000		3332	3309
									249.999			3129
•									270.000		3240	3766
									300.000	•	3273	3062
									330.000		3392	3196
LPHA	( 2)	=	264	BETA	•	3)	=	4.931	radius Phi	,000	.333	.667
									,000	3513	3615	3525
									30.000		3544	3675
•									69.999		3609	3482
									90.000		- 3490	3452
									129,999		3415	3499
									135.000		3415	3598
									150.000		3247	3213
									165,999		3295	3763
									180.000		3499	3735
									195.000		3527	3725
									210.000		3349	3946
									225,990		3566	3812
•									249.999		5566	3567
				٠.					. 270,900		3641	3553
				•					300.000		3525	3476
									330.090		3538	3599
LFHA (	(3)	=	3.978	BETA	(	1) :	=	.999	RADIUS	.000	.333	.667
								**	PHI	7000	2 40-	3400
	•							•	.000	3296		3195
									30.000		3468	3499
								•	60.000		3330	3378
									99,999			3417
				٠				٠.	120.000			3391
									135,000		3210	3131
			•						150.000	•	3141	2934
									155.000		3195	2865
									180.000		3182	2998

195.000

-.3212 -.3382

ORIGINAL PAGE IS OF POOR QUALITY ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF ET BASE

(REUIS1)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CF

ALPHA ( 3) =	3.978 BETA (1) =	.cco. RADIUS	בפפ.	.333	.667
		219,000		3257	3664
		225,000		3275	3494
		240.000		מכפס.	3291
		270.000		3322	3244
		399,990		3399	3161
		330 000		- 3/03	_ 3315

DATE 03 MAY 75

# TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1431

ARC11-D14TA19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REUISE) . ( D4 FEB 75 )

## REFERENCE DATA

### PARAMETRIC DATA

						•					
SHEF	=	2690.000d SQ.FT.	XMRF	=	976,0000 TN, YT			Five PB		P	
LOFF	-							ELV-IB =	. פפפ	ELV08 =	.999
			YMEP	Ξ	TY. NI CCCC.			RUDDER =	פפפ.	MACH =	1.100
BREF	=	1290.3000 IN.	THER	-	499,9999 IN. ZT			.,		171CH -	1.100
			Ziadi	•	433 0000 14 St			GIMBAL =	2.000		
SCALE	=	none ·						41. DAL -			

## SECTION ( 1) ET BASE

### DEPENDENT VARIABLE CF

		•				
ALPHA (1) = -3.900 BETA (1) =	.000	RADIUS Phi	.000	.333	.667	
		.000	4951	4983	4097	
		30.000		4113	4259	
		60.000		4918	4389	
		90.000		4092	4438	
		120.000		4951	4227	
	_	135.000		4048	4112	
		150.000		4017	4977	
		165.000		3958	4033	
		189,999		4037	3919	
		195.000		4973	4174	
•		219,999		4994	4291	
		225.000	•	4128	4168	
		249.000		.0000	4216	
		279.999		4075	4394	
		300.000		3988	4277	
		330,000		4004	4114	
ALFHA ( 2) =255 BETA ( 1) = -	4 .000	RADIUS	.000	.333	.667	
		PHI		,,,,,		
		.000	3948	4986	4299	
		30.000		4959	4234	
		60.000		4983	4173	
		90,000		4130	4193	
		120,000		4983	4206	
		135.900		4145	4292	
		150.000		4110	4557	
		165,999		~.3986	4432	
		180.000		3932	3835	
		195,000		3854	4004	
•		210.000		3924	3989	
		225.000		3819	3982	
•		240.000		.0000	3985	
		279.999			4177	
		300,000		4964	4222	
		330.000	•		4156	



ARC11-014TA19 OTS+STRUT SRB-OFF MTS-OFF ET BASE

(REU132)

	Addi Sidinis	3.0.0.0.0	,,,	
SECTION ( 1) ET BASE	DEFENDENT	VARTABLE CP		
CPHA (2) =213 BETA (2) = .0	D9 RADIU Phi	כפפ.	.333	. 667
	.99	3522	3667	3761
	30.00	o ·	3664	3863
	60.00		3632	3916
	90.00	פ	3650	4009
	120.00	9	3609	3778
	135.00	ū	3642	3597
	150.00	מ	3596	3519
•	165.99	פ	3517	3544
	180.99	o .	3592	3428
	195.00	פ	3560	3632
	210.00	9	3565	3756
	225.00	מ	3503	3731
	240.00	io.	ממפס.	3738
	270.00	מו	3611	3822
	300.00	מו	3593	3811
	330.00	מ	3639	3812
ALPHA ( 2) =219 BETA ( 3) = 4.5	28 RADIU	s ,000	.333	.667
	PHI			
	.00	04931	4048	4141
	30.00	io .	4976	4170
	60.00	מ	4086	4185
	90.00	10	, 4997	4197
	120.00	מ	3883	3937
	135.99		3878	3917
	159.99		3868	3918
	165.00			4046
•	180.99	19	3890	3875
	195.00		3936	4312
•	210.00		4922	4516
	225.00		4956	4193
•	249.99		.0000	4126
	279.99		4939	4975
	300.00		4945	4598
	330.00	מי	4958	4158
META (3) = 3.981 BETA (1) = .0		000.	.333	.667
	FHI			
•	.99		3769	3852
	30.99		3836	3991
	60.00		3824	3970
	99.00		3847	4035
	120.00	9	3764	3905
	135.00	g	-,3783	3846
•	150.00	9	3767	3763
•	165.00	o	3665	3746
	180.00	פ	3761	3621
	195.00	ס	3742	3873

ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ET BASE

(REU132)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.981 BETA	(1) =	.000	RADIUS PHI	.000	.333	.667
				210.000		3747	3864
				225.999		3765	3832
				240,000		בככנו,	3809
				270.000		3732	3878
				300.000		3651	
				330.000		3685	3857

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.000 1.250

ARC11-0141A19 OTS+STRUT SRB-OFF MES-OFF ET BASE

(REU133) ( 94 FEB 75 )

ELV-06 =

MACH =

### REFERÈNCE DATA

### PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	YMRP =	2000 IN. XT 2000 IN. YT 21 IN. ZT				000. = 9300UP 000. = 9300UP 000.\$ = ,46MID
SECTION ( 1) ET BASE		DEPENDENT VAR	IABLE CF	•		
ALPHA ( 1) = -4.044 BETA	(1) = .003	RADIUS Phi	מממ.	.333	.667	
		פפס,	3325	3412	3542	
		30,000		3447	3662	<b>එ</b> එ
		60.000		3482		¥ \$
·		90,000		3596	3705	Ä
	•	120,000		3434	3456	ORIGINAL PAGE I
		135.000		3447	3360	S.X
		150.000		3399	3396	お出
•		165.000		3331	3270	ຄ
		190,000		3331	3196	Z 5
		195.000		3314	3447	A E
		210.000		3317		
	٠	225.000		3317	-,3552	F
, .	•	240.000		.0000	3596	<b>⊬</b>
		270,000		~.3333	3573	
		300.000		3290	3476	
		330.000		3339	3434	
ALPHA ( 2) =198 BETA	(1) = -4.000	₹ADIUS PHI	.000	.333	.667	
		.000	3442	3469	3676	
		39,999	•	3530		
		60,000			3655	
		90,000			3729	
		120,000			3614	
		135,099			3568	
•		150.000		3484	3756	
		165.000			3697	
•		180,000			3328	
And the second second		195,000			3463	•
	•	219.000		3309	3412	
		225,999			3380	
		249.990			3409	
		279,999			3507	*
		300,000			3477	
		330.000			3679	
	•	555.555				

### ARC11-014TA19 OTS+STRUT SRB-OFF MFS-OFF ET BASE

(REU133)

	ARC	11-0141A19 OTS	S+STRUT S	RB-OFF !	MFS-OFF ET
SECTION ( 1) ET BASE		DEFENDENT VA	·		
ALFHA (2) =162 BETA (2) =	.009	RADIUS	.ספפ.	.333	.667
	7	PHI		,	•
		פפפ.	3134	3151	3271
		30.000		3191	3415
		60.000	*	3177	-,3322
		מכת. מפ		3251	3431
		120.000		3211	3236
		135.000		3235	3181
		150.000			3131
		165.000		- 3144	3112
		180,000	•	3158	3021
		195.000			3296
		510.000		3137	3381
		225.090		3152	3333
		240.000		.0000	3295
		270.000		3121	3348
. •	•	300.000		3061	3165
		339.000		3099	3279
ALPHA ( 2) =210 BETA ( 3) =	4.031	RADIUS	.000	.333	.667
		PHI		* ,	
		.000	3395	3419	3653
• •		30.000		3493	3659
		60.000		3428	3548
		90.000		3355	3503
		120.000		3254	3462
		135.000			3390
		150.000		3332	3387
		165.000		3315	3384
		180.000		3350	3292
		195.000			
		210,000		3374	3593
				3412	3763
		225.999 249.999		3473	3649
•				.0000	3709
		270.000		3565	3623
		399.999		3543	3601
		330.000		3465	3863
ALPHA ( 3) = 3.848 BETA ( 1) =	.003	RADIUS	,000	.333	.667
		PHI			
		.000	3298	3992	3234
		30,000		3252	3470
		. 60.000		3274	3247
		90.000		3303	3424
		120,000		3295	3452
		135,000		-,3322	3322
	•	150.000		3395	3287
	•	165.000		3217	3260
		180.000		3246	3163
		195.000		3195	3395

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# ARC11-014TA19 OTS+STRUT SRB-OFF MPS-OFF ET BASE

(REU133)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

A'_PHA ( 3) =	3.846 BETA (1) =	.003	RADIUS PHI	,000	.333	.667
			210.000		3179	~.3360
			225.000		3179	3498
		- *	249.999	•	בככם.	~.3346
			270.000		3146	3309
			300.000		3090	3131
			330.000		3116	3479

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### TABULATED SOURCE FRESSURE DATA - 1A19 ( ARC 11-D14 )

FAGE 1437

ARC11-014TA19 OTS+STRUT SRB-OFF MES-OFF ET BASE

(REU134) ( D4 FEB 75 )

### REFERENCE DATA

### FARAMETRIC DATA

SREF	2	2699.0000 SQ.FT.	XMRF		976.0000 IN. XT	,		ELV-18 =	פפפ.	ELV-OB =	.999
LREF	=	1290.3000 IN.	YMRF	= .	TY .NI CCCC.			RUDCER =	מפת,	MACH =	1.400
BREF	=	1290.3000 IN.	ZMAL	=	499.9999 IN. ZT			GIMBAL =	2,000		
SCALE	=	.9209			•						

### SECTION ( 1) ET BASE

### DEFENDENT VARIABLE CP

ALPHÁ (1) =	-3.981	BETA	( 1)	=	.000	radius Phi	000	.333	.667
						 .000	3007	3029	2976
						30.000		3973	3294
						60.999		~.3957	3160
4.3						99.999		3937	3165
						129.999		3018	3285
						135.000		3056	3252
	1 *					150.000		3961	3453
						165.000		2997	3257
						180.000		3026	3932
						195,000		3037	3214
						210.000		3006	3208
						225.000		3024	3200
						249,000		ספפס.	3159
						270.000		2982	3129
						300,000		2881	3053
						330.000		2950	3056
ALPHA ( 2) =	231	BETA	(1)	ŧ.	-4.000	RADIUS	.000	.333	.667
ALPHA ( 2) =	231	BETA	(1)	÷ -	-4.999	RADIUS PHI	.000	.333	.667
ALPHA ( 2) =	231	BETA	<b>(1)</b>	<b>:</b> •	-4,000		.000	.333	.567 2899
ALPHA ( 2) =	231	BETA	(1)	± •	-4.999	PHI			
ALPHA ( 2) =	231	BETA	(1)	=	-4,900	PHI .000		2907	2899
ALPHA ( 2) =	231	BETA	( 1)	<b>.</b>	-4.999	991 900 30.900		2907 2953	2899 3077
ALPHA (2) ±	231	BETA	(1)	± •	-4,500	60.000 60.000		2907 2953 3011	2899 3077 2997
ALPHA ( 2) =	231	BETA	(1)	<b>±</b>	-4,900	7HT 000.00 000.00 000.00		2907 2953 3011 3060	2899 3077 2997 3199
ALPHA ( 2) =	231	BETA	(1)	*	-4.999	PHI .000 30.000 60.000 90.000 120.000		2907 2953 3011 3060 3025	2899 3077 2997 3199 3363
ALPHA ( 2) =	231	BETA	(1)	<b>±</b> •	-4 . 999	PHI .000 30.000 60.000 90.000 120.000 135.000		2907 2953 3011 3060 3025 3110	2899 3077 2997 3199 3363 3213
ALPHA ( 2) =	23i	BETA	(1)	<b>±</b> •	-4.990	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000		2907 2953 3011 3060 3025 3110 3053	2899 3077 2997 3199 3363 3213 3238
ALPHA ( 2) =	231	BETA	( 1)	•	-4.900	PHI		2907 2953 3011 3060 3025 3110 3053 2918	2899 3077 2997 3199 3363 3213 3238 3344
ALPHA ( 2) =	23i	BETA	(1)	<b>±</b> •	-4.900	6HI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 189.000		2907 2953 3011 3060 3025 3110 3063 2918 2935	2899 3077 2997 3199 3363 3213 3238 3344 2883
ALPHA ( 2) =	23	BETA	(1)	± -	-4.900	6HI .000 30.000 60.000 90.000 120.000 150.000 150.000 165.000 180.000 195.000		2907 2953 3011 3060 3025 3110 3063 2918 2935 2885 2839	2899 3077 2997 3199 3363 3213 3238 3344 2883 2768 2748
ALPHA ( 2) =	23	BETA	(1)	•	-4.990	PHI		2907 2953 3011 3060 3025 3110 3063 2918 2935 2885 2839 2815	2899 3077 2997 3199 3363 3213 3238 3344 2883 2768 2748 2748
ALPHA ( 2) =	23	BETA	(1)	•	-4.900	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 180.000 195.000 210.000 225.000 240.000		2907 2953 3011 3060 3025 3110 3063 2918 2935 2885 2839 2815	2899 3077 2997 3199 3363 3213 3238 3344 2883 2768 2748 2919 2913
ALPHA ( 2) =	23	BETA	(1)	•	<b>-4 . 999</b>	PHI		2907 2953 3011 3060 3025 3110 3063 2918 2935 2885 2839 2815	2899 3077 2997 3199 3363 3213 3238 3344 2883 2768 2748 2748

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(REU134)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CF

SECTION ( 1	1) ET BASE				DEFENDENT VARI	ABLE UP		
ALPHA ( 2) :	=231	BETA	(2) =	.009	RADIUS Phi	.000	.333	. 667
					.000	2685	2702	2715
					30,000		2711	+.2871
					60,000		2553	2862
					90.000		2762	2953
					120.000		2749	2825
					135.000		2779	2724
					150.000		2760	2661
					165.000		2679	2650
					180,000		2733	2579
• • •					195.000		2708	2899
			•	4 1	219.999		2793	~.2785
			•		225,000		2683	3041
	• .				249.000		.0000	2913
					270.000		2655	2846
					390.000		2539	2715
					330.000		2571	2681
ALPHA ( 2)	=219	BETA	(3) =	4.928	RADIUS	.000	.333	.667
ACTUAL TO			· .		FHI			
					.000	2921	2896	2944
					30.999		2892	2899
					60.000		2933	3036
					90.000		2877	2953
					120,000		2790	2949
					135.000		2851	2898
•					150.000		2821	2883
	•				165,000		2823	2937
					180.000		2889	2798
					195,000		-,2904	3052
					210.000		2944	3190
					225.000		2985	3311
					240.000		מפפפ.	3523
					279.999		3959	3135
					300.000		2988	2961
					330.000		2916	3936
ALPHA ( 3)	= 3.930	BETA	(1) =	.993	RADIUS FHI	.000	.333	.667
	•				.000	2660	2455	2792
					30.000		2578	2592
					60.000		2731	2691
					90.000		2753	2765
<b>4</b>					120.000		2699	2735
					135,000		2772	2695
					150.000		2774	2674
				•	165.000		2695	2645
					180.000		-,2692	
							2691	2848
					195.000		-,2031	-,2040

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TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1439

ARCII-014IA19 OTS+STRUT SRB-DEF MES-DEF ET BASE

(REU1341)

SECTION ( 1) ET BASE

DEFENDENT VARIABLE CO

225.000 -.2695 -.3150 240.000 .0000 -.2923 270.000 -.2654 -.2692 300.000 -.2555 -.2532 330.000 -.2534 -.2642

-.2654 -.2692 -.2555 -.2532 -.2534 -.2642

TTILLEDAY LANGERINGO

.000

.900

# ARC11-014TA19 OTS+STRUT SRB-NOM MES-NOM ET BASE

(REUI35) ( 04 FEB 75 )

ELV-08 =

MACH =

### REFERENCE DATA

### PARAMETRIC DATA

פפפ.

. מממ

2.000

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRF = 976.0000 IN YMRF = .0000 IN ZMRF = 400.0000 IN	. YT	ELV-18 = RUDDER = GIMBAL =
SECTION ( 1)ET BASE	DEPEND	ENT VARIABLE CP	
ALPHA ( 1) = -4.348 BETA	•	ADIUS .000 .333	.667
	•	.00042164259	4439
	3		4546
			4407
• •			24419
			4472
	-	5.000422	
			3933
	16	5,0004145	73941
	18	9.9994155	4011
•	19	5.000419	54471
Contract to the second	21	0.900424	4558
	22	5.0004289	34323
	24	מכתם. ממס. מ	
			74194
			4351
	33	0.999425	4491
ALPHA ( 2) =390 BETA	(1) = -4.990 R	SEE. DOD. SUIDA	.667
		.000 - 4394 - 4326	4363
	3	.4379 בספט פ	34599 .
	6		34425
•	9	o.000435	74424
•	12	0.9994219	
			4055
	15	g.999 ~.4246	•
	16	• • • • • • • • • • • • • • • • • • • •	3 <b></b> 3991 .
		0.000425	
		5.0004276	
		o.0004339	
		5.0004342	
•		-	14344
		0,0004370	
•		0.0004344	
	33	o.0004339	4471

# ( 10-11-014 ) PIAT - ATA STRUCK PRESSURE DATA - 1419 ( ARC 11-014 )

ARC11-014TA19 OTS+STRUT SRB-NOW MES-NOW ET BA	ARC11-01	4TA19 OTS	S+STRUT	SCR-NOW	455-N-W	FT BAS
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(REU135)

ARCS	1-0141A19 OT	S+STRUT	14CM-878	HES-NOW E	T BASE	•	(
SECTION ( 1)ET BASE	DEPENDENT YA	RIABLE C	Þ	•			
SIC. = (2) ATEM ARE. = (2) AHEJA	RADIUS PHI	. פכפ	.333	. 667			
	.000	4218	4192	~.3978			
	30.000	4210	4157				
	60.000		3988				
	90.000			4472			
	120.000			4375			
	135.000		3911				
	150,000		3832				
	165.000			3972			
	180,000			- 3693			
	195.000			4064	•		
	219.000			4252			
	225,000			4948			
	240.000			3915			
	270.999		4232	3925			
	300.000			3804			
	330.000			3974			
ALFRA (2) =345 BETA (3) = 4.025	RADIUS PHI	.000	.333	.667			
	.000	4429	47.47	4000			
	30.000 000.05	4429	4347 4479				
	60.000						
	90.000		4429 4398	4295			
	120.000			4117			
	135.000		4284	4235			
			4302		•		
	150.000		- 4293				
	165.909		4394				
	180.000			4511	•		
•	195.000 210.000		-,4503	- 4687			
	225.000		4499				
	249.999			4400			
	270.000			4378			
				4282	•	•	
	339.000 339.000		4509 4437	4152 4419			
ALPHA ( 3) = 3.903 BETA ( 1) = .006	RADIUS Phi	.000	.333	.667			
	.000	4077	4400				٠.
	000,00			3957			
				4214			
	60.000			4979			
	90,000			4189		•	
	120.000			4039			
	135.000	•		3941			
	150.000			3879			
	165.000			3811			
	189.000			3770			
	195 000		- 7000	40.00			

195,000

-.3999 -.4259

ARC11-014TA19 DES+STRUT SRB-ND4 MES-ND4 ET BASE

(REU135)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.901	BETA ( 1) =	.006	RADIUS PHI	,000	.333	.667
				210.000		4017	~.4380
				225.000	•	3988	4190
				240.000		פפפפ.	4069
				270,000		4035	-,4001
		•		300,000		4067	3862
•				330.000		- ,4099	4129

LREF = 1290,3000 IN.

ARC11-0141A19 OTS+STRUT SRB-NON MFS-NOM ET BASE

(REU136) ( D4 FEB 75 )

FAGE 1443

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1.100

### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

TY WI CCCC = THY

# PARAMETRIC DATA

.ooo

ELV-IB =

RUDDER =

TAFE = 1500.2000 IV.		וא יאון הה			1000E4 = 1000
BREF = 1290,3000 IN.	ZMRF = 400,00	oo in. zt.			GIMBAL = 2.000
SCALE = 10200	•				
SECTION ( 1)ET BASE		EPENDENT VAR	TABLE CP		•
					•
ALPHA ( 1) = -4.008 SETA	(1) ± .003	RADIUS SHI	.000 .333	.667	
		.009	4194428	24158	
	1	30,000		74339	
•	•	60 .000		04453	
		90.000		D4579	
and the second second		120.900		3 - 4428	00
		135.000		34313	ORIGINAL PAGE IS OF POOR QUALITY
		150.000		04255	d Dj
		165.000		5 -,4216	Q E
•		189,999		64026	2 ₹
		195,000		9 - 4262	2 4
		219.000		54380	<b>စ</b> ွဲ
	•	225.000		14399	<u>U</u> P,
	•	249.000		D4378	A) (C
		279.999		54488	
		399.999		94367	
•		330.000		94214	K 63
		المرابعة المرابعة	-,413	3	
ALPHA ( 2) =342 BETA	(1) = -4.000	RADIUS	.000 .333	.667	
	•	PHI			
		.000	-,4989417	84298	
		39.999	415	84325	
in the second second		60.000	417	94232	
		90,000	425	14318	
		120.000	419	74341	
•		135.000	426	24521	
•		150.000	422	94699	
		165.000	413	54606	
		180.000	410	94038	
•		195,000	491	4 -,4213	. •
		210.000	399	44149	
		225.000	399	64142	
	•	240.000	.500	94199	
		270.000	~.419	24269	•
		300.000		34329	•

330.000

-.4198 -.4254

(REU136)

SECTION ( 1)	ET BASE					DEPENDENT VAR	IABLE CP		
ALPHA ( 2) =	318	BETA	( 2)	=	.012	RADIUS	.000	.333	. 567
						מפ <b>פ.</b>	-,3522	3719	3867
						200.00		3745	-,3989
					_	60,000		3794	4023
•					,	90.000		3831	-,4114
4			-			120.000		3751	3975
						135.000		3749	~.3645
						150.000		3710	3569
						165.000		3616	3551
						180.000		3589	3474
						195.000		3558	3700
						210.000		3572	3925
				•		225.000		3600	3809
						249.999		.0000	3940
						270.000		3609	3938
						200.000		3632	4925
						339.000		3678	3887
ALPHA ( 2) =	419	BETA	( 3)	=	4.931	RADIUS • FHI	. 202	.333	.667
						.000	3990	4058	4195
						30.000	- 15555	4098	4201
						60.000		-,4091	4227
						90.000		4011	4126
						129,999		3991	~.3952
						135.990		3901	3910
						150.000		3871	4928
•						165,999		3811	4057
						180,000		3902	3905
						195,000		3968	4289
						210.000		4010	~.4495
						225.000		4976	4197
						240.000		.0000	4173
						279.000		4076	4102
					•	300.000		4097	4121
						330,000		4073	4173
			• •	•		332			
ALPHA ( 3) =	3.717	BETA	(1)	=	.999	RADIUS	.999	.333	.667
						PHI			
						.000	4932	-,4079	4265
						30.000		4167	4334
						60.000		4129	4322
						99.000		4142	4349
						120,000		4065	4195
						. 135.999		4087	4989
						י כפנו. מז 1		4945	-,4009
						165.000		3965	3994
						180,000		4005	3872
						195.500		4022	4155

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# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1445

ARC11-014TA19 OTS+STRUT SRB-NOW MES-NOW ET BASE

(REUISE)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.717	BETA	(1) =	.000	RADIUS FHI	.000	.333	.667
					219,999		4946	4222
	. *				225.000		4934	4156
					240.000		פפפס.	4173
			•		270.000		4049	4288
					300.000		3973	4162
	•				330 000		4029	4214



# ARC11-014IA19 OTS+STRUT SRB-NC4 MPS-NC4 ET BASE (REU137) ( 04 FEB 75 )

### REFERENCE DATA

SREF. = 2690.0000 50.FT. XMRP = 976.0000 IN. XT בקבר = 1290.3000 IN. און פפפפ. פפס IN. און פפפפ ZMRP = 400,0000 TN. ZT BREF = 1290.3000 IN. SCALE = .0200

פפפ. = 80-V\_3 ccc. E\_V-IB = .000 MACH = 1.250 RUDDER = 2.000 GIMBAL =

PARAMETRIC DATA

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CF

ALPHA ( 1) = -4.149 BETA ( 1) =	.006 RA	מפת. פטוכ	.333	.667
		.0003138	3297	3288
•		.000	3286	3429
		.000	3264	3448
		,000	-,3288	3422
		.000	3209	3231
		.000	3223	3129
		.000	3297	3075
		.900	3134	3936
	189	.000	3119	3024
	195	. 000	3114	3227
	210	.000	3114	3428
	225	פפס,	3127	3342
	249	000,	בכככ.	3315
		.000		3355
	399	.000	3996	3266
•	339	. פמס	3146	3235
				FC7
ALPHA ( 2) =414 BETA ( 1) = -		.01US .000	.333	.667
ALPHA ( 2) =414 BETA ( 1) = -	4.993 RA	II		
ALPHA ( 2) =414 BETA ( 1) = -	1-1	ii .000. – 000.	3146	3256
ALPHA ( 2) =414 BETA ( 1) = -	F-F 30	II .0003098 .000 -	3146 3152	3256 3458
ALPHA ( 2) =414 BETA ( 1) = -	35 60	11 1,000 <b>-,3</b> 098 1,000 -	3146 3152 3177	3256 3458 3239
ALPHA ( 2) =414 BETA ( 1) = -	90 90 91	11 .000 <b>3</b> 098 .000 . .000 .000	3146 3152 3177 3226	3256 3458 3239 3282
ALPHA ( 2) =414 BETA ( 1) = -	65 65 95 120	11 .0003098 0.000 1.000 1.000	3146 3152 3177 3226 3145	3256 3458 3239 3292 3228
ALPHA ( 2) =414 BETA ( 1) = -	30 60 90 120 133	71 2000 - 3098 2000 2000 2000 2000 2000	3146 3152 3177 3226 3145 3164	3256 3458 3239 3282 3228 3284
ALEHA ( 2) =414 BETA ( 1) = -	30 60 90 120 133 150	7	3146 3152 3177 3226 3145 3164 3159	3256 3458 3239 3282 3228 3284 3465
ALEHA (2) =414 BETA (1) = -	30 60 90 120 131 150	11 .0003098 .000 .000 .000 .000 .000 .000	3146 3152 3177 3226 3145 3164 3159 3943	3256 3458 3239 3292 3228 3284 3465 3495
ALPHA (2) =414 BETA (1) = -	30 60 90 120 13 150 16		3146 3152 3177 3226 3145 3164 3159 3043 3090	3256 3458 3239 3292 3228 3284 3465 3405 3062
ALPHA (2) =414 BETA (1) = -	30 60 90 120 13 15 16 180 195		3146 3152 3177 3226 3145 3164 3159 3943 3900 2973	3256 3458 3239 3292 3228 3284 3465 3405 3062 3175
ALPHA (2) =414 BETA (1) = -	30 60 90 120 13 15 16 180 190 210		3146 3152 3177 3226 3145 3164 3159 3043 3000 2973 2936	3256 3458 3239 3292 3228 3284 3465 3405 3405 3105 3101
ALPHA (2) =414 BETA (1) = -	30 60 90 120 13 15 16 16 19 210 22		3146 3152 3177 3226 3145 3164 3159 3003 2973 2936 2942	3256 3458 3239 3282 3228 3284 3465 3405 3405 3175 3101 3047
ALPHA (2) =414 BETA (1) = -	30 62 90 120 13 15 16 18 195 210 22 24		3146 3152 3177 3226 3145 3164 3194 3093 2973 2973 2936 2942	3256 3458 3239 3292 3228 3284 3465 3405 3175 3101 3047 3051
ALPHA (2) =414 BETA (1) = -	30 62 90 120 13 15 16 16 195 21 22 24 24 27		3146 3152 3177 3226 3145 3164 3159 3093 2973 2973 2936 2942 .0000 2963	3256 3458 3239 3282 3284 3465 3405 3175 3101 3047 3051 3137
ALPHA (2) =414 BETA (1) = -	150 120 120 131 150 161 180 195 221 241 270		3146 3152 3177 3226 3145 3164 3194 3093 2973 2973 2936 2942	3256 3458 3239 3292 3228 3284 3465 3405 3175 3101 3047 3051

PAGE 1447

# ARC11-0141A19 OTS+STRUT SRB-NOM MES-NOM ET BASE

(9EUI37)

SECTION ( 1) ET BA	ISE .		DEPENDENT VA	RIABLE C	=	
ALPHA ( 2) = -,4!	59 BETA (2)	= .009	RADIUS PHI	ממם.	.333	. 567
			.000	2897	2899	2968
			30.000		2941	3122
		•	69.999.		2924	3054
•			90.000	•	-,2954	3169
			120,099	•	2929	~.2959
			135.000		2954	2994
			150,000		2946	
			165.000		2853	2920
			180.900		2892	2759
			195.000		2861	2935
			219.999		2863	3079
			225.000		2871	3029
			240.000		.0000	3013
			270.000		2855	3092
			200.000		2791	2881
			339,999	•	2852	3927
LFHA ( 2) =46	BETA (3)	= 4.928	RADIUS	.001	.333	.667
•	•		PHI			

PHI			
.000	3921	3021	3211
30.000		3913	3182
50.000		3026	3142
90.000		2966	3064
120.000		2901	3032
135.000		2941	2980
150.000		2929	3001
165.000		2991	2975
180.000		2962	2885
195.000	•	-,2999	3213
219,999		3037	3345
225.000		3058	3189
240.000		.0000	3187
270.000		3106	3166
300.000		3989	3199
330.000		3934	3379
RADIUS	.999	.333	.667
PHI			
פפפ.	3996	2886	2993
30.000		3030	3216
60.000		3076	3973
90,000		3121	3174
120,000		3065	-,3191
135.000		3073	3113
150.000	-	3067	3011
165.000		3004	3016
180.000		2990	2949

-.2964 -.3151

195,000

ARC11-014TA19 OTS+STRUT SRB-NOM MES-NOM ET BASE

(REU137)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CF

ALPHA :	(3):	= 3,864	BETA	(1)=	.003	RADIUS PHI	.מפני.	.333	.657
						210.000		2945	3141
						225.000		2963	~.3232
						240.000		.0000	3110
						270.000		2915	3086
						300.000		2842	2925
						330,000		2890	3202

ORIGINAL PAGE IS OF POOR QUALITY

1.400

ARC11-D14TA19 OTS+STRUT SRB-NOM MES-NOM ET BASE

(REU138) ( 04 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

									MYMME I Y I C	DATA
SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	YMRF = .D	990 IN. XT 990 IN. YT 990 IN. ZT				•	ELV-18 RUCCER GIMBAL	=	.000 .000 2.000	ELV-08 Mach
SCALE = .0200										
SECTION ( TET BASE	,	DEPENDENT VA	RIABLE CF	;			• •			
ALPHA ( 1) = -4.153 BETA	( i ) = (i )	RADIUS PHI	.000	.333	.667					
•		.000	2439	2495	2352					
		20.000		2434	2528					
		65.000		2382	2455					
		90.000		2436	2577 .					
00		120.000		2494	2541					
~ F		135.000		2432	2530					
H 10		150.000		2412	2474					
Ŏ ij		165.000		2357	2438				•	
28		189.999	*	2431	2327					
# P		195,000		2433	2516					
<i>و</i> .		210.999			2597					•
<u>, , , , , , , , , , , , , , , , , , , </u>		225.000			2499					
A)		240.000			2441					
口景		279.099		2499	2435					
月二	•	399.999		-,2356	2392					
ORIGINAL PAGE IS OF POOR QUALITY		330.999		2378	2398					
ALPHA ( 2) =387 BETA	(1) = -4.000	RADIUS <sub>.</sub> Phi	.000	.333	.667					
•		במפ.	-,2310	2374	2342					
		30.000		2416	2482					
		60.000		2454	2495					
		90.000		2484						
		129.999		2459	2597					
•		135.000		2409	2679	*		•		
		150.000		2491						
•		165.000		2278	2718					
		189.999		2257	2390			•		
• . •		195.000		2261	2328					
		210.999		2229	2277					

225,999 249,993

270.000

300,000 330.000

.9999 -.2352

-.2175 -.2319 -.2217 -.2387

-.2273 -.2494

ARC11-0141A19 OTS+STRUT SRB-NOM MPS-NOM ET BASE

(REU138)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

	25011	JR4 ( 176	. 0435							
	AI GMA	(2) =	- 318	RETA	(2) =	ecc.	RADIUS	.000	.333	.667
	ALIBA	, -	-,310				PH1			
							.000	-,2234	2235	2164
							30,000	•	2275	2486
							60,000		2237	2410
S	<u> </u>						פממ. מפ		2282	2443
-27	ORIGINAL						120.900		-,2251	2311
POOR QUALITY	$\mathbf{C}$						135.000		2276	2236
2	9		•				150.000		2245	2177
$\frac{1}{2}$	$\overline{A}$						165.000		2176	2168
-	L						189,000		2219	2086
ည	ht)						195.000		2212	2319
Ĭ	Ď						210.000		-,2197	2374
<b>H</b>	PAGE						225.000		2221	2369
اين	E		٠.				240.000		.ספפם	2346
3	5						270.000		2197	2358
(	<b>5</b> '						במס, פפצ		2119	2260
							330.000		2165	2247
							3331222		•	
	AL CLUB	(2) =	354	BETA	(3) =	4.931	RADIUS	,000	.333	.667
	A'_ITIIA		-:534	DEIA	. •.		PHI			
							.000	2344	2358	2337
							30.000		2274	2252
						-	60.000		2241	2316
٠							90.000		2196	2285
							129.990		2190	2358
							135.990		2273	2298
						•	150.000		2279	2333
			-				165,999		2213	2294
							180.999	4	2309	2172
							195.000		2279	2445
							219,999		2319	2595
				•			225.090		2344	2654
	• *						249.000		.0000	2796
							270,999		2476	2561
							399 .999		2425	2496
							339.000		2389	2445
									•	
	ALPHA	('3) =	3.939	BETA	(1) =	.000	RADIUS	.000	.333	.667
	-						PHI			
							.000	2150	1983	2214
							30.000		2095	2193
		,		•			69.999		2192	2212
							90.000		2254	2286
							120.999		2173	2184
							135.000		2199	
							150.000		2176	
							165.000		2097	2973
			•				180.000		2127	1999
			:		•		195.999		2124	2282





DATE DS MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1451

### ARC11-014TA19 OTS+STRUT SRB-NOM MES-NOM ET BASE

(REU138)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CF

ALPHA (	3) =	3.939	BETA	(1) =	.000	RADIUS	.000	.333	.667
						PHI 210.000		2119	2232
				1		225.999	ě	2121	2473 2312
		ဝ္	Ö	•. •		270.999 399.000		2115 2057	2198
		7	R T			330.000		2026	2026
		POOR	7					•	
		& ± 7	• • •						
	l	AGE A F				•			
	7.7	SI II						•	
		. (2)			•				

ARC11-D14TA19 OTS

SRB-OFF MPS-OFF ET BASE

(REUTS9) ( 94 FES 75 )

REFER	ENCE	DATA
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976.0000 IN. XT SREF = 2690.0000 SQ.FT. XMRF = TY .NI פפפם. YMRF = LREF = 1290.3000 IN. ZMRF = 400,0000 IN. ZT BREF = 1290.3000 IN. SCALE = .0200

פמפ. ELV-08 = פמפ. ELV-IB = .900 MACH = .ספפ. RUDDER = 1.000 GIMBAL =

PARAMETRIC DATA

SECTION ( 1) ET BASE			DEFENDENT VAR	TABLE CP		
ALPHA ( 1) = -8.139	BETA (1) =	.000	RADIUS PHI	.000	.333	.667
			.000	3693	3744	3599
	*		30,000		3780	3786
			62.000		-,3673	3699
4.6			מבם. מפ		3667	3852
			120,000		3599	3963
			165.000	•	3485	-,3620
			150.000		3468	3483
			165.000		3483	3441
			180.000		3696	3426
•			195,000	*	3701	3727
			210,000		3721	3867
*			225,000		-,3699	3797
4000			240,000		בכממ.	3643
			270.000		3762	~.3552
			300,000		3701	3619
			330.000		3723	3753
ALPHA ( 2) = -4.03	BETA ( 1) =	.000	RADIUS FHI	.000	.333	.657
			פמפ.	3359	3358	3233
			30.000		3418	3469
	•		60.000		3317	3395
		ŕ	90.000		3287	3535
			120,000		3217	3596
			135.999		-,3181	3283
			150.000		3145	3061
	•		165.990		3997	
	•		180.000		3292	2977
			195.990		3334	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			210.000		3392	
			225.000		3414	
			249.990		פמפפ.	
			279.000		3368	
			300,000		3342	
		-	330,000		3376	3373

OF POOR QUALITY

ARCI 1-DI4TA19 OTS SRB-OFF MES-OFF ET BASE

(REU139)

Section	.(	1) ET	BASE	

# DEPENDENT VARIABLE CE

	3 ,667	.333	מממ.	RADIUS Phi	-4,003	(1) =	BETA	228	=	( 3)	.FHA
30,000 -36 60,000 -35 90,000 -31 120,000 -31 135,000 -31 150,000 -31 150,000 -31 165,000 -31 165,000 -31 195,000 -31 210,000 -31 225,000 -33 330,000 -31 330,000 -31 34,000 -31 35,000 -31 35,000 -31 36,000 -31 37,000 -31 38,000 -31 39,000 -31 39,000 -31 120,0	413549	3541	- 346A								
60,00035 90,00035 120,00035 120,00035 130,00035 150,00035 150,00035 160,00035 160,00035 180,00035 180,00035 220,00035 220,00035 220,00035 300,00035 300,00035 100,00035 100,00035 120,000		3623	-13440								
90.00031 120.00031 120.00031 135.00031 150.00031 165.00031 165.00031 165.00031 165.00031 165.00031 195.00031 225.0003 225.0003 300.00031 300.00031 300.00031 100.000031 1		3517									
120,000 - 3 135,0003 150,0003 160,0003 180,0003 195,0003 210,0003 220,0003 240,0003 300,0003 300,0003 FHI		3523									
135.0003 150.0003 150.0003 165.0003 169.0003 189.0003 195.0003 210.0003 225.0003 226.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 120.0003		3510	*,								
150.00033 165.00033 165.00033 180.00033 195.00033 210.00033 225.00033 240.000 .00 270.00033 330.00033 330.00033 330.00033 8446MA (3) =244 BETA (2) = .912 RADIUS .000 .33 80.00033 80.00033 80.00033 80.00033 120.00033	·										
165.0003 180.0003 180.0003 195.0003 210.0003 225.0003 220.0003 220.0003 300.0003 300.0003 300.0003 300.0003 300.0003 40.0003			. •								
180,00033 195,00033 210,00035 225,00036 300,00036 300,00036 300,000314736											
195.00033 210.00033 225.00033 225.00033 300.00033 300.00033 300.00033 300.00033 300.00031 44.644 (3) =249 BETA (2) = .012 RADIUS .000 .33 60.000314732 30.000314732 30.00031 30.00031 100.000031 100.000	-	-									
210,0003 225,0003 240,0003 300,0003 300,0003 300,0003 300,0003 300,0003 300,0003 300,0003 4ALPHA (3) =249 BETA (2) = .912 RADIUS .900 .3 50,0003 50,0003 120,0003		3382									
225.0003 240.000 .00 270.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 300.0003 120.0003 120.0003 155.0003 155.0003 165.0003 180.0003		3374	•								
240.000 .00 270.00033 300.00033 300.00033 300.00033 300.00033 300.00033 ALPHA (3) =249 BETA (2) = .012 RADIUS .000 .33 PHI .000314733 300.00033 60.00033 120.00033 120.00033 155.00033 155.00033 165.00033 165.00033 180.00033 180.00033 240.00033 240.00033 240.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033		3442									
270.00033 300.00034 330.00035  ALFHA (3) =249 BETA (2) = .012 RADIUS .000 .33  PHI .000314732 30.00035 60.00035 120.00035 120.00035 150.00035 150.00035 150.00035 165.00035 165.00035 180.00035 210.00035 225.00035 225.00035 225.00035 300.00035 300.00035 ALFHA (3) =261 SETA (3) = 4.928 RADIUS .000 .35 BHI .00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036 30.00036		3449									
300.00034 330.00035  ALFHA (3) =249 BETA (2) = .012 RADIUS .000 .33 PHI  .000314732 30.00035 60.00035 120.00035 120.00035 150.00035 150.00035 165.00035 160.00035 180.00035 195.00035 240.00035 225.00035 240.00035 300.00035		.0000									
330.00033  ALPHA (3) =249 BETA (2) = .012 RADIUS .000 .33  PHI		3533									
ALPHA (3) =249 BETA (2) = .012 RADIUS .000 .33  PHI .000314733 30.00035 60.00035 120.00035 120.00035 155.00035 165.00035 165.00035 180.00035 180.00035 240.00035 240.00035 240.00035 300.00035		3478	•								
FHI  .000314732 30.0003147 60.00033 60.00033 120.0003 120.0003 120.0003 135.0003 150.0003 165.0003 180.0003 180.0003 195.0003 225.0003 225.0003 225.0003 300.0003	153645	3515		330.000							
30.00033 60.00033 90.00033 120.00033 120.00033 150.00033 150.00033 165.00033 165.00033 195.00033 195.00033 210.00033 225.00033 225.00033 220.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033	.657	.333	,000	_	.012	(2) =	BETA	24	=	( 3)	PHA
30.00033 60.00033 90.00033 120.00033 120.00033 150.00033 150.00033 165.00033 165.00033 195.00033 195.00033 210.00033 225.00033 225.00033 220.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033 300.00033	493055	3249	3147							•	
60,00036 90,00036 120,00036 135,00036 150,00036 150,00036 165,00036 180,000		3295	•								
90,0003: 120,0003: 120,0003: 135,9003: 150,0003: 165,0003: 169,0003: 195,0003: 210,0003: 225,0003: 225,0003: 226,0003: 300,0003: 300,0003: 300,0003: 310,0003:		3278									
120,0003: 135,9003: 159,0003: 165,0003: 165,0003: 180,0003: 180,0003: 195,0003: 210,0003: 225,0003: 229,0003: 249,0003: 300,0003: 300,0003: 310,0003:		3148									
135,9003; 150,0003; 165,0003; 165,0003; 195,0003; 195,0003; 210,0003; 225,0003; 240,0003; 300,0003; 330,0003; 330,0003; ALPHA (3) =261 9ETA (3) = 4.028 RADIUS .000 .3; PHI .00034013; 30,0003; 60,0003; 90,0003;		3118									•
150,000 -39 165,000 -39 165,000 -39 180,000 -39 195,000 -39 210,000 -39 225,000 -39 240,000 -39 270,000 -39 300,000 -39 300,000 -39 330,000 -39 330,000 -39 330,000 -39 3401 -39 300,000 -		3140									
165,00030 180,00030 180,00030 195,00030 210,00030 225,00030 225,00030 249,00030 270,00030 300,0		-,3086									
180,00039 195,00039 195,00039 210,00030 225,00030 240,00030 270,00030 300,00030 330,00030 330,00030 FHI00034013 60,00036 90,00036		3042				. •					
195.00035 210.00035 225.00035 249.000 .05 270.00035 300.00035 330.00035 330.00035 ALFHA (3) =261 SETA (3) = 4.028 RADIUS .000 .35 PHI .00034013 30.00036 60.00036 90.00036		3953	•								
210,0003 225,0003 249,000 .99 270,0003 300,0003 300,0003 330,0003 ALFHA (3) =261 SETA (3) = 4.928 RADIUS .999 .3 FHI .90034013 39,0003 60,0003 99,9003		-,3093									
225.00036 240.000 .99 270.00036 300.0003 300.0003 330.0003  ALFHA (3) =261 SETA (3) = 4.028 RADIUS .000 .33  FHI  .00034013 30.0003 60.0003 90.0003		3177		•							
249,000 .00 270,00030 300,00030 330,00030 330,00030 ALFHA (3) =261 SETA (3) = 4.928 RADIUS .000 .30 FHI .00034013 30,000360,0003 60,000360,0003		3213									
270.00030 300.00030 330.00030 330.00030 ALFHA (3) =261 SETA (3) = 4.928 RADIUS .000 .30 PHI .00034013 30.00030 60.00030 90.00030		,9999									
300.0003 330.0003 330.0003 ALPHA (3) =261 SETA (3) = 4.028 RADIUS .000 .3 PHI .00034013 30.00034013 60.0003 90.0003		3213									
330,0003 ALPHA (3) =261 SETA (3) = 4.928 RADIUS .000 .33 PHI .00034913 30,0003 60,0003 90,0003		3143			•			_			
ALFHA (3) =261 9ETA (3) = 4.028 RADIUS .000 .33 PHI .00034013 30.0003 60.0003 90.0003		3153						•			
PHI .00034013 30.0003 60.0003 90.0003	·	-, 51 75		220.000				٠			
30.0003 60.0003 90.0003	.667	.333	.000		4.028	( 3) =	<b>B</b> ETA	261	=	( 3)	LFHA
60.0003 90.0003	793629	3479	3491	.000							
90.0003	233659	3423		30.000	•	•					
90.0003		3479					•	•			
		3596									
120 nnn - 3	-	3526		120.000							
		3554									
		3556									
•		3396					•				
							٠.				
		3270 3246		_							

ARC11-014TA19 OTS SRB-OFF MES-OFF ET BASE

(REU139)

SECTION ( 1) ET BASE			DEPENDENT VAR	IABLE CF			
LPHA ( 3)' =261 BETA ( )	3) =	4.028	RADIUS Phi	.000	.333	.667	
			219.999		3238	3185	
			225.000		3298	3349	
	-		240,000	•	בפפפ.	3505	
			270,000		3463	3568	
			300.000		3501	~.3611	
			339.999		3514	3767	
LFHA ( 4) = 4.032 BETA (	1) =	.003	RADIUS PHI	.999	.333	.667	
			.000	~.3265	3418	2915	
			30.090		3491	3221	
			60.000		3362	3161	
			90.000		3278	3389	
			129.090		~.3218	3397	
			135.000		3218	3182	•
			150.000		3142	3025	
			165.000		3989	2900	
•			180.000		3187	2812	
· .			195.000		3225	3290	
			219,999		3260	3610	
			225.000		3338	3429	
			249.999		. 2222	3179	
			270.000		3312	3197	
			300.000		3348	3039	
			330.000		3420	3165	
LFHA ( 5) = 7.920 BETA (	1) =	.003	RADIUS PHI	.999	.333	.667	
••			.000	3389	3568	3238	
			39,999		3638	3628	
			65.000		3497	3435	
			90.000		~.3455	~.3359	
			120.000		3358	3377	
			135,000		3320	3251	
			159.999		3399	3195	
			165.000		3199	3013	
			180.000	•	3289	3169	
			195.000	•	3273	3513	
<u>.</u>			219.999		3324	3896	
			225.000		3356	3666	
•			240.000		כפפם.	3495	
•			279.000		3439	3376	
			פפת, פמב		3447	3324	
			339,999		3554	3511	

DATE 03 HAY 75

TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-914 )

FAGE 1455

ARC11-D14TA19 OTS

SRB-OFF MPS-OFF ET BASE

(REU149) ( 04 FEB 75 )

### REFERENCE DATA

 SREF
 =
 2690.0000 SQ.FT.
 XMRP
 =
 976.0000 IN. XT

 LREF
 =
 1290.3000 IN.
 YMRP
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN.
 ZMRP
 =
 400.0000 IN. ZT

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000 RUDDER = .000 MACH = 1.100 GIMBAL = 1.000

SCALE = .0200

### SECTION ( 1) ET BASE

# DEPENDENT VARIABLE CF

ALPHA ( 1) = -	7.992	BETA (	1) =	.003	RADIUS	.000	.333	.667	
					PHI			4233	
					מממ.	4300	4321	4739	
					30.000		4366	-,4500	
					60.000		4362		
		•			90.000		4384	4612	
100					120,000		4265	4620	
					135.000		4292	4335	
					150.000		-,4269	4250	
# **					165.000		4221	4188	
					180.000		4253	4147	
					195.000		4255	4460	
					210.000		4290	4349	
					225.000		4339	-,4686	
		•			240.000		.0000	4612	
					270.000		4312	4441	
		•			300.000		- 4251	4285	
					330.000		4199	4321	
ALPHA (2) =		BETA (	1) =	.003	RADIUS	.000	.333	.667	
ucianu y ev			•		PHI				
					.000	3888	4016	-,3995	
					30.000		4929	4991	
				•	60.000		3959	4246	
					90.000		3966	4275	
					120.000		3946	4954	
					135,000		3941	3993	
					150.000		3953	3921	
					165,000		3859	3886	
					180.000		3943	3818	
					195,000		3939	4115	
					210.000		3982	4265	
	1.4	•			225.000		4019	4115	
					240,000		פפפס.	4133	
			•		270.000		4010	4304	
					מפס. ממנ		3855	4164	
					330.000		-,3992	4939	

ORIGINAL PAGE IS

ARC11-D14TA19 OTS

SRB-OFF MS-OFF ET BASE

(REUI4D)

SECTION ( 1)ET BASE

SECTION ( 1	JET BASE	=			DEPENDENT V	ARIABLE C	<b>P</b>		
ALPHA ( 3) =	225	BETA	(1)-=	-4.090	RADIUS Phi	.000	.333	. 667	
					.000	4171	4258	4451	
					39.999		4260		
•					60.000		4351	4592	
•					90.000		4491	4596	
					120.000		4243	4347	
					135.000		4243		
					150.000		4232	4124	
					165.000		4132		
					180.000		4179	4959	
					195.000		4186	4555	
					210.000		4215	4272	
					225.000		4223	4286	
					240.000				
					270.000		.0000 4205	4293 4244	
					300.000		4193	4244	
					339.000				
					ارائيانية و من تر ن		4215	4364	
ALPHA ( 3) =	159	BETA	(2) =	.012	RADIUS	.000	.333	667	
					PHI	ک ور دن ہو		.667	
					.000	3603	3831	3949	
					30.000	3003			
					60.000		3839	4986	
					90.000		3853 3890	4110	
					120.000			4145 - 3071	
					135.000		3950 3865	3971	
					150.000			3736	
					165.000		3811	3672	
						•	3732	3630	
					180.000		- 3695	~.3597	
					195.000		3691	3837	
					219.999		3691	3921	
					225.993		3716	3915	
					249.999		.0000	4057	
					270,000		3656	4097	
					300.000		3763	4138	
					339.999		3784	3991	
LPHA ( 3) =	31€	BETA	. 21 -	4 000					
( 5) -	315	OCIA	(3) =	4.028	RADIUS	.000	.333	.667	
					PHI				
					.000	4004	4095	4288	
	•				39.999		4984	4224	
	•	•			60.000		3998	4165	
					בכם. בפ		4949	3969	
					120.000			4978	
					135.000			4156	
•					150.500			4199	
					165.000			4197	
					180.000			3989	
					195.999			3861	
					- /			5861	

ORIGINAL PAGE IS OF POOR QUALITY TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1457

ARC11-014TA19 TIS SRB-JFF MFS-JFF ET BASE

(REU149)

SECT	154 C	1) E	T BASE					DEF	ENDENT VA	TABLE CP		
LPHA	(3)	=	-,312	BETA	( 3)	=	4.028		RADIUS	.999	.333	.667
			,,,,				40		PHI			
									210,000		3966	393
									225.000		4003	398
									240.000		מממת	415
									כפס. כלב		4096	428
									300.000		4079	429
									330.000		- 4098	427
									550.000		145,55	-,
<b>ILFHA</b>	(4)	=	3.885	BETA	( 1)	=	.000		RADIUS	.000	.333	.667
									PHI			
					•				.000	4973	4109	426
									30.000		4158	
			-						60.000		413 <u>1</u>	- 435
	-								90.000		4159	435
									120.000		4977	422
									135.000		4139	411
									150.000		4107	- 409
									165.000		4045	-,404
									180.000		4973	398
									195.000		495	424
									210.000		4080	427
									225.000		4091	423
				÷			÷		240.000		.0000	421
									270.000		4013	428
									300.900		4015	419
									330.000		4050	424
NLPHA	( 5)	=	8.073	BETA	(1)	=	פפפ.		RADIUS	.000	.333	.657
									PHI			
-									בכת.	4597	+.4480	447
									30.000		~.4551	473
									60.000		4537	458
									90.000		- 4453	469
									129,999		4374	458
									135.000		-,4450	460
									150.000		4457	473
				•			•		165.000		4375	479
									180.000		4473	456
					,				195.999		4448	
		•			,		•				4445	4
					,				219,999		4456	460
		٠			*				219,999 225,999		4455 4460	470 460 452
		•							219,999 225,999 249,999		4456 4460 .0000	450 452 446
		•							219,909 225,909 249,999 279,999		4456 4460 .0000 4406	460 452 446 446
									219,999 225,999 249,999		4456 4460 .0000	450 452 446

FAGE 1458

ARC11-0141A19 OTS SRB-OFF MS-OFF ET BASE

(REU141) ( 04 FES 75 )

### REFERENCE DATA

SARAMETRIC DATA

- GEE	3	2690.0000 SQ.FT. 1290.3000 IN. 1290.3000 IN. .0200	YMRP	2	976.0000 .0000 400.0000	ī٧.	YT		ELV-IB = QUDDER = GIMBAL =	:	.000 .000 .000	ELV-DB MACH	.000 1.250
STACE	•	ימבחח										·	

SECTION ( 1) ET BASE DEPENDENT VARIABLE CP

ALPMA (	1) =	-8.232	BETA	(1) =	006	RADIUS	. מכני	.333	.667	
		•	•			מכם.	3852	-,3652	3403	
						30.000		3840	4155	
						60.000		3841	4163	
		•				מכת. מפ		3910	4195	
						120,000		3852	3996	
						135.000		3887	3805	
						150.000		3857	3777	
						155.000		3835	3762	
						180,000		3850	3759	
						195.000		3857	4047	
						210,000		3898	4082	
						225,000		3908	~.3953	
	•					249.999		מפספ.	4959	
						270.000		3819	-,4923	
						300.000		3613	3798	
						330.000		3556	3637	
ALPHA (	2) =	-4,098	BETA	(1) =	006	RADIUS	בפם.	.333	.657	
						FHI				
						.000	3331	-,3385	~.3500	
						30.000		3433	3631	
					•	60.000		3417	3695	
						90.000		3447	-,3598	
						2.000				
						120.000		3374	3457	
									3457 3349	
						129.000		3374		
						129.999 135.999		3374 3371	3349	
						129.999 135.999 159.999		3374 3371 3353	3349 3299	
		•				120,000 135,000 150,000 165,000		3374 3371 3353 3276	3349 3299 3237	
		•	•			129.000 135.000 150.000 165.000 189.000		3374 3371 3353 3276 3350	3349 3299 3237 3164	
		•	•			120,000 135,000 150,000 165,000 180,000 195,500		3374 3371 3353 3276 3350 3322	3349 3299 3237 3164 3349	
		•	•			120.000 135.000 150.000 165.000 180.000 195.000 210.000		3374 3371 3353 3276 3359 3322 3394	3349 3298 3237 3164 3349 3457	
			•			120,000 135,000 150,000 165,000 180,000 195,000 210,000 225,000		3374 3371 3353 3276 3350 3322 3304 3325	3349 3299 3237 3164 3349 3457 3495	
		•	•			120,000 135,000 150,000 165,000 180,000 195,000 210,000 225,000 240,000		3374 3371 3353 3276 3359 3322 3304 3325	3349 3298 3237 3164 3349 3457 3495	

-.3485 -.3537

-.3497 -.3527

(REU141)

				ÀR	27G @141410-11	S	75-OFF V	is-off et	BASE
SECTION ( 1)	ET BASE				DEFENDENT VAR	TABLE CF			
ALPHA ( 3) =	~.243	BETA	(1) =	-4 .000	RADIUS PHI	.000	.333	. 667	
			•		,000	3369	3339	3531	•
					ממפ, מכ	. , , , , ,		3746	
			•		60.000			3753	
•					90.000			3942	
					120.000			3590	2,0
					135.000			3374	" ₹
					150.000	•	34%	3326	<b>7</b> 5
					165,000		-,3423	3327	8₽
					180.000			3314	$\widetilde{\mathcal{A}}$
					195.000			3449	\$ H
			-		210.000			3591	4 D
					225.000			3613	ORIGINAL PAGE I OF POOR QUALITY
					240.000		מַממנים.	3613	$\Xi \mathfrak{L}$
		-			270.000		3385	3525	H ra
					300.000		3246	3317	₹ <i>5</i> 5
					330.000		3286	3625	
ALPHA ( 3) =	171	BETA	(2) =	.012	RADIUS	.000	.333	.667	
					PHI				
					.000	3193	3177		
	• .				30.000			3378	•
					60.000			3265	
					90.000		3231		
•					120.000			3337	
					135.990			3253	
					159.999			3182	
					165.000			3171 3041	
* 1					189.009			3217	
					195.000 210.000			3331	
				•	225.000			3320	
					249.999			3394	
					270,000			3341	•
					300.000			3135	•
	•			•	339,999			~.3363	•
ALFHA ( 3) =	171	BETA	( 3) =	4.925	RADIUS PHI	.000	.333	.667	
		. 5			.000	3445	3463	3586	
					30.000			3536	
					60.000			~.3362	
				•	90.000			3514	
			•		120.000		3490		
•					135,999			3534	
					150.000			3640	
					165.000			3539	
					100.000		7405	3533	

189,999

195.000

ARC11-014TA19 OTS

SRB-OFF MES-OFF ET BASE

-.3411 -.3618

-.3427 -.3998 .0000 -.3712

-.3397 -.3573

-.3347 -.3382

-.3442 -.3847

(REUI41)

DEPENDENT VARIABLE CF SECTION ( 1)ET BASE RADIUS .333 .667 ALFHA ( 3) = -.171 BETA ( 3) = 4.025 PHI -.3506 -.3572 210.000 -.3549 -.3575 225,000 .0000 -.3793 249.000 -.3613 -.3699 270.000 -.3699 -.3698 300.000 -.3605 -.3861 330.000 RADIUS .000 .333 ALPHA (4) = 7.860 BETA (1) = -.003 рнI מממ. -.3435 -.3387 -.3621 30,000 -.3504 -.3850 60,000 -.3572 -.3638 -.3588 -.3639 90,000 120,000 -.3482 -.3610 -.3615 -.3590 135,999 150.000 -.3530 -.3532 -.3504 -.3492 165.000 -.3470 -.3397 189.593 195,000 -.3432 -.3571

219.999

225,000

240,000

279.999

300.000

330.000

OF POOR QUALITY

PAGE 1461

.999 1.499

ARCII	-01	47A1	270 9
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SRB-OFF MPS-OFF ET BASE

-.2972 -.2870

-.2957 -.2932

-.2958 -.2942 -.2908 -.3103

.0000 -.3018

-.2797 -.2937

-.2699 -.2765

-.2752 -.2783

(REU142) ( 04 FEB 75 1)

		CE	

### FARAMETRIC DATA

REFERENCE DAT	A						The service of the	•
SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRF = 976,9000 YMRF = .9000 ZMRF = 400.9000	IN. YT			•	ELV-IB = QUDDER = GIMBAL =	.000 ELV- .000 MACH 1.000	-08 = -1 =
SECTION ( 1) ET BASE	DEF	ENDENT VAR	TABLE CF				•	
ALPHA ( 1) = -4.059 BETA	(1) = (1)	RADIUS THI	.000	.333	.667			
		.000	3006	2979 3014		YTIJAUQ	OF POOR	ı
•		30.000		2989		' byce is		
		60.000		2973		21 ADAG	TAIMPIGO	
• •		90.000						
		120.000		2953 3017				
		135.000		3023				
		150,000		2994			_	
	· •	165.000				•	•	
		180.000		3032				
		195.000		3012				
		210.000			3132			
		225,000			3269			
		249.000			3152			
		270.000			3100			
		300.000			3009			
		330.999		2926	2993			
ALPHA ( 2) =183 BETA	(1) = -3.997	RADIUS PHI	מממ.	.333	.667			
		.000	2932	2868	2726		,	
		39,000		2973	3109			
		60.000		2990	3039			
•		90.000			3041			
		120.000			3052			
•		135.990			2979			
	•	150.000			2971			
		165.000			2952			
•								

180.000

195.000

219.999

249.990

270.000

300,000 330,000 ARC11-014TA19 OTS

SEB-OFF MES-OFF ET BASE

(REU142)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CE

SECTION ( 1)E	DASE					30. 2			
ALPHA ( 2) = -	195	BETA	(2)	=	.012	RADIUS	, פפפ	.333	.667
721117 1 =1						FHI			
						, 999	2719	2649	2563
						30.000		2683	2821
						60.000		-,2697	2906
						90.000		2774	2910
		•			÷	125,555		2750	2828
						135,000		2788	2721
						150.000		2779	2795
						165.000	•	2731	2665
						160,000	,	-,2753	2697
						195.000		2739	2739
		•				210.000		2739	2913
						225,000		2760	2897
						240,000			2893
						240.000 270.000		2644	2821
						390,999		2535	2570
						330.000		2576	2599
						220 -555		-,,,,,	
ALPHA ( 2) =	.027	BETA	( 3)	=	4.028	RADIUS PHI	.000	.333	.667
No. of the second						.000	2953	2893	2728
						30,000		2840	2906
						60,000		2805	2934
						90.000		2748	3033
						120.000		2790	3979
						135.000		2869	3135
						159.993		2878	3039
						165.000		2835	3198
						180,000		2993	3124
						195.000		2933	3193
						210.000		2934	3221
						225,990		2937	3182
	•					240.000		בפפפ.	-,3495
-						270,999		2987	3181
						399.000		2956	3997
						339.000		2955	3151
ALPHA ( 3) =	3,924	BETA	(1)	=	.003	RUICAR	,000	.333	.667
						FHT		03.50	2699
						.000	2609		
						30.00		2519	
						60,000		2644	
						90.000		2698	
						120,000		2636	
						135.000		2799	
						150.000		2719	
						165.939		2559	
						189.999		2 354	
						195.000		-,2653	2780

(REU142)

	ARC11	-9141A19 OTS	SRB-OFF	MFS-OFF ET E	BASE				
SECTION ( 1) ET BASE	ום	DEPENDENT VARIABLE CP							
ALPHA ( 3) = 3.924 BETA ( 1)	= .003	RADIUS .000 PHI	.333	. 667					
		210.000	2627	2976					
•		225,000	2630	2912					
•	•	240.000		2799					
•		270.000		2627					
		300.000		2448					
		330.000		2589					
MEHA ( 4) = 7.809 BETA ( 1)	€ .003	RADIUS .000 PHI	.333	. 557	ORIGINAL OF POOR				
		.000238	2393	2737	₽ \$				
		30,000	2453	2867	ع ح				
		60.000		~.2673	QUALITY				
•		90.000		2758	PAGE QUALI:				
		120.000	2519		F G				
		135.000		2655					
		150.000	2581	2591	Z 12				
		155.000	2504	2563	1 02				
•		180.000	2463	2450					
		195.000	2427	2574					
		210.000	2393	2673					

225.000

240.000 270.000

300.000 330.000 -.2494 -.2896

-.2445 -.2963

.0000 -.2732 -.2399 -.2540 -.2380 -.2419

.000

.900

ARC11-0141A19 OTS

SRB-VOM MIS-OFF ET BASE

(REU143) ( D4 FEB 75 )

ELV-08 =

MACH =

PARAMETRIC DATA

### REFERÊNCE DATA

 SREF = 2690.0000 Sq.FT.
 XMqP = 976.0000 IN. XP
 ELV-IB = .000

 LREF = 1290.3000 IN.
 YMRP = .0000 IN. YT
 RUDDER = .000

 BREF = 1290.3000 IN.
 ZMRP = 400.0000 IN. ZT
 GIMBAL = 1.000

 SCALE = .0000

SECTION DET BASE

### DEFENDENT VARIABLE CF

SECTION () ET BASE	DEFENDENT VARIABLE CF							
LPHA ( 1) = -8.133 BETA ( 1) = .003	RADIUS PHI	.000	.333	.667				
	פפפ.	4994	4924	+.4539				
	30,000		4127	4724				
	60.000		-,4219	4662				
	90.000		4153	4018				
	120,000		-,4025	4201				
	135,000		4937	4001				
	150.000		3990	3821				
	165.000		4938	4122				
	180.000		3971	4316				
	195,999		4197	4545				
	210.000		4965	4641				
	225,000		4592	4543				
	249.999		.0000	4494				
	270.000		4120	4387				
•	300.000		4059	4539				
	330,000		4181	4733				
LPHA ( 2) = -4.002 BETA ( 1) = .003	RADIUS FHI	.000	,333	.667				
	.000	3472	-,3551	3395				
	30.990		3543	3519				
	60.000		-,3351	3420				
	90.000		3355	3680				
	120,000		3237	3750				
	135.999		3225	3437				
	159.099		3194	3184				
	165.000		3119	3128				
	180,000		3425	3010				
	195.000		3464	3374				
	219.999	•	~.3523	3625				
•	225.000		3545	3513				
•	249.990		פספפ.	3395				
	279.000		3523	3351				
	300.000		3472	3297				
	330.000		3547	3491				

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FAGE 1465

(REU143)

ARC11-014TA19 OTS SRB-NOW MES-OFF ET BASE DEPENDENT VARIABLE CP SECTION ( 1) ET BASE .000 .333 .667 ALPHA (3) = -.342 BETA (1) = -4.000RADIUS FHI -.3624 -.3721 -.3749 בכת. -.3795 -.4985 30.000 60.000 -.3786 -.3999 פתם. מפ -.3748 -.3797 -.3695 -.3714 120,000 -.3668 -.3448 135.000 159.000 -.3676 -.3349 165.000 -.3567 -.3295 180,000 -.3547 -.3191 195.000 -.3561 -.3536 210.000 -.3589 -.3769 -.3640 -.3960 225.000 .0000 -.3980 249,000 270.000 -.3664 -.3757 -.3643 -.3739 300.000 -.3687 -.3902 330.000 RADIUS .000 .333 .667 ALPHA ( 3) = -.357 BETA ( 2) = PHI . פפפ -.3440 -.3414 -.3238 30.000 -.3499 -.3590 60.000 -.3435 -.3435 90.000 -.3362 -.3569 129.999 -.3328 -.3575 135,000 -.3319 -.3391 150.000 -.3222 -.3971 165.000 -.3167 -.3914 180.000 -.3372 -.2988 195.000 -.3343 -.3409 -.3421 -.3797 219.000 225.000 -.3449 -.3611 240.000 .0000 -.3413 270,000 -.3439 -.3363 -.3417 -.3272 200.000 330.000 -.3392 -.3420 ALPHA ( 3) = -.288 BETA ( 3) = 4.922RADIUS .000 .333 .667 PHI .ססס -.3617 -.3570 -.3610 39.999 -.3579 -.3717 60.000 -.3519 -.3453 90.000 -.3669 -.3614 -.3731 -.3853 120.000 -.3693 -.3757 135.000 -.3637 -.3694 150.000

165,000

180.000

195.999

-.3489 -.3769

-.3470 -.3615

-.3409 -.3259

ORIGINAL PAGE IS OF POOR QUALITY

(REUT43)

MATTAND SOOM OF

	AQC11-D:	SRB-NOW MPS-OFF ET BASE				
SECTION ( 1) ET BASE	DEP!	ENDENT VARI	ABLE CF			
ALPHA ( 3) =288 BETA ( 3) =	4.022	qadius phi	בכם.	.333	.667	
	•	210.000		3397	3255	•
		225.000		3494	3490	
		240.000			3562	
		270.000		3583		
		300.000		3555	3669	
		330.000			3793	
ALPHA ( 4) = 3.924 BETA ( 1) =	.000	RADIUS PHI	.000	.333	.667	
		בכפ.	3300	3409	3332	
		30.000		3537	3646	
		60.000		3484	3571	
		90.000		3415	3475	
		120.000		3275	3439	
•		135,000		3295	3194	
		150.000		3242		
•		165.000		3182	2960	
		180.000		3237		
		195.000		3262	3458 - 3689	
		210.000		3265		
		225.000			3431	
		240.000 270.000			~.3393	-
		300.000			3364	
		339.999			3599	
ALPHA ( 5) = 7.962 BETA ( 1) =	000	radius Phi	.000	.333	.667	
		.000	3321	3546	3178	
		30,000			3535	
		60.000			3351	
· •		90.000			3447	
		120,000			3375	
		135.000			3211	
	•	150,000			3974	
		165.000			2927	
		189.993			3007	
·		195.000			3427	
•		210.509			~.3695	
		225.000			3522	
		249.999			3315	
				- 3051	- 3285	
		270.999				
		270.000 000.000		3293	~.3245 ~.3325	





TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-D14 )

FAGE 1467

ARC11-014TA19 OTS STB-NO4 MFS-OFF ET BASE

(REU144) ( 04 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

		•			· ·				
SREF	=	2690.0000 SQ.FT.	XMRP	=	976.0000 IN. XT	ELV-IB =	מפפ.	ELV-08 =	.000
					.0000 IN. YT	RUDDER =		MACH =	
BREF	=				400.0000 IN. ZT	GIMBAL =	1.000		••••
	_								

### SECTION ( 1) ET BASE

DATE 03 MAY 75

### DEPENDENT VARIABLE CF

ALFHA ( 1) = -8.106 BETA ( 1) = .000	RADIUS	.000	.333	.667
	PHI			
		3872	3937	3943
	30.000		4010	4389
	69.999		4929	4143
	90.000		4016	4158
	120.000		3912	4239
	135.000		3939	3944
	159.999		3932	3816
	165.000		3876	3786
•	189,999		3896	3818
	195.000		3833	4142
•	219.999		3880	4968
	225.000		3897	4275
	240.000		.0000	4223
	270.000		3889	-,4070"
	300.000		3840	3914
	330.000		3838	3960
ALPHA (2) = -4.038 BETA (1) = .000	RADIUS PHI	מפמ.	.333	.667
	.000 -	. 3649	3769	3779
	30,000		3799	3874
	60,000		3741	3942
	90.000		3765	3988
•	120.000		3729	3827
	135.000		3763	3754
• •	150.000		3705	3672
	165.000		3669	3650
	180,000	•	3663	-:3625
	195.000		3709	3883
	210,000		-,3749	4008
	225.000		3809	3993
	240.000		.0000	3940
	270.000		-,3733	4965
	300.000		3648	3923
	330.000		3637	3898
	ورون پرونون		-, 3037	3000

ARC11-014TA19 OTS

SRB-NOM MES-OFF ET BASE

SECTION ( 1)ET BASE

### DEPENDENT VARIABLE CF

3441		C1 0435	•				200	Elencial Avi	(173 0		
LEHA	(3) =	363	BETA	(1)	= -4	.003		RADIUS PHI	.000	.333	. 667
								.000	4066	4131	4318
								30,000		4142	4318
								60.000		4194	4372
								90.000		4207	4294
								120.000		4041	4235
								135.900		~.4578	-,4079
				•				150.000		4939	4929
	*							165.000		3989	3959
								180.000		4955	~.3913
								195.000		4091	4943
								210.000		4979	4181
								225,000		4092	4188
								240.000		מפספ.	4190
•.								270,000		4049	4119
			•					300.000		4012	4415
								330.000		~.4090	4302
ALPHA	(3) =	363	BETA	( 2)	=	.012		RADIUS PHI	.000	.333	.667
								מפס.	3462	-,3666	3892
								30,000		3797	3945
								60.000		3749	4921
								90.000		~.3745	4003
								120.000		3686	3844
								135.000		3794	3517
								150.000		3645	3575
								165.000		3563	3551
		• •						180.999		3547	3486
								195.000		3554	3631
								210.000		3596	3897
								225.000		3698	3897
	•							240.000		ממממ.	3894
								279.999		3537	3948
								399.999		3574	4943
	•							330.000		3590	3825
LEHA	( 3) =	393	<b>SETA</b>	( 3) =	= 4	.022		RADIUS	.000	.333	.667
								PHI			
		•						כממ.	3856	3935	41-65
								39.999		3920	4088
				•				60.000		3881	4090
								90.000		3881	3998
								129.999		3839	3934
					•			135,000		3891	4002
			•					150.000		3996	4054
								165.000		3819	4927
								180.000		~.3831	3745
								195,000		- ,3833	- ,3679

(REU144)





DA.	۲F	93	MAY	75

### TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

-.4199 -.4221

-.4185 -.4412

FAGE 1469

(REUI44)

			•						
	ARCI	1-014TA19 Ors	5 9	MCH-872	es-off E	T BASE			
SECTION ( 1) ET BASE		DEPENDENT VARIABLE CP							
ALPHA ( 3) =393 BETA ( 3)	= 4.022	RADIUS PHI	.000	.333	.667				
		219,999		3891	3764				
		225.999		3928	3866				
		240.000		.0020	3966				
		270.000		3896	4059				
		300.000		3906	4120				
•		330.000		3927	4124				
ALPHA ( 4) = 3.888 BETA ( 1)	= .000	RADIUS PHI	.000	.333	.567				
		פמפ.	4923	4050	4158				
		30,000		4993	4310				
		60.000		- 4099	4245				
	•	90.000		4097	4275				
		120.000		4923	4148				
		135.000		4973	4065				
		150.000		4047	3978				
		165.000		3970	3950				
		189.900.		4009					
•	•	195.000			4170				
		210,000		4021	4222				
		225.000		4994	4148				
	•	240.000			4112				
		270.000		3979					
		300.000			4090				
• 4		330.000		3953	4143				
ALPHA ( 5) = 7.977 BETA ( 1) =	.000	radius Phi	.000	,333	.667				
		,000	4249	4229	4274				
• 1		30.000		4318	4475				
		60.000		4328	4344				
• •		מבמ. מפ		4311	4494				
	. •	120,000		4214	4411				
		135.000		4294	4421				
•		150.000		4270	4339				
		165.999		4202	4351				
		189.999		4219	4292				
		195.000		4221	4452	•			
•		210,000		4226	4427				
•		225.000		4209					
		249.999		. ככככ	4333				
		279.990		4154	4335				

330,000

ARC11-014TA19 OTS

SRB-NOW MPS-OFF ET BASE

(REU145) ( 04 FEB 75 )

### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT YHRF = LREF = 1290.3000 IN. דץ או פספס. BREF = 1290.3000 IN. ZMRP = 400,0000 IN. ZT .0200 SCALE =

.000 ELV-08 = ELV-IB = .000 RUDDER = .000 MACH = 1.250 GIMBAL = 1.000

FARAMETRIC DATA

SECTION ( 1) ET BASE

### . DEFENDENT VARIABLE CP

ALFHA	(1)	= .	-8.244	BETA	(1) =	009		RADIUS	.000	.333	.667	
								PHI				
								. פפס	3332	3194	2917	
								30.000		3346	3596	
								69.999		3336	3623	
								90.000		3492	3613	
							,	120.000	•	3314	3469	
								135.999		3320	3298	
								150.000		3319	3261	
								165.999		-,3265	3217	
								180,000		3329	3199	
					•			195.000		3324	3496	
			•					219.999		3336	3524	
								225.000		3365	3413	
								249.999		פפפס.	3461	
								279.999		3268	3413	
								390.999		3124	3235	
								330.000		~.3093	3126	
ALPHA	( 2)	<u>.</u> .	-3.936	BETA	(1) =	009		RADIUS	.000	.333	.667	
								PHI				
								בפפ.	2913	2978	3025	
								30.000		3027	3199	
								60.000		3099	3186	
								90.0ÓO		3023	3209	
								129.999		2955	3014	
								135.000		2954	2916	
								150.999		2934	2847	
								165.000		2891	2830	
								189.999		2889	2894	
								195.000		2897	~.2964	
					•			210.000		2877	3975	
			•					225.000		2904	3951	
								249.000		.0000	3956	
								270,000		2873	3122	
			•					300.000		2817	-,3003	
								330,999		-,2918	3027	

PAGE 1471

ARC11-014TA19 OTS

SRB-NOW MES-OFF ET BASE

(REU145)

		WACT.	-3141/115 513	, ,	CO-HUN-	. 5 5	01135		( =====================================
SECTION ( 1) ET BASE	E	וס	EPENDENT VA	RIABLE CA	:				
ALPHA ( 3) =309	BETA (1) = -	-4 .993	RADIUS PHI	.000	.333	.667			
			בכב.	2994	2959	2929			
			ממת. מכ		3127	3259			
			60.000			3966			
			90.000		3197	3292			
•			120,000		2957	3939			
			135,999			-,2984			-
			150.000		2987	2952			
			165.000		2935	2938			
			180.000		2997	2895			
			195.000		3923	3004			
•			210.000			3977			_
			225.000		3076	3192			-
		•	240.000			3954			
•			270,000			2984			
			300.000			2844			
	. *		339.999			3238			
				•	•				
ALPHA ( 3) =360	BETA (2) =	.009	RADIUS	.000	.333	.667			
			PHI				1		
			. 000	2783	2746	2816			
			30.000		2819	3932			
			60.000		2798	2893			
			90.000		2853	3021			
			120.000		2892	2912			
			135.990		2829	2850			
			159.999		2896	2749			
			165.999		2777	2731			
	i		180.999		2759	2691			
	•		195.000		2767	2832			
	•		219.999		2757	2914			
			225.000		2783	2886			
			249.999		כככם.	2995			
			270.000		2723	2958			
			300.000		2657	2756			
			339.999		2728	2978			
ALFHA ( 3) =49	BETA ( 3) =	4.025	RADIUS	.000	.333	.667			
			FHI	0050	0054	7000			
			.000	2932	2954				
			39.999			3196			
			60.000			2882			
			90.000			2966			
			120.000			3075			
			135.000			3199			
			150.000			3124			
			165.000			3145			
			190.000			3925		•	
			195.999		2979	2985			

(REU145)

			AIA - I	419 ( ARE 11-914	)
	ARC	11-014TA19 Of	'S	SRB-NOW MES-OFF	ET BASE
SECTION ( 1) ET BASE		DEPENDENT VA	RIABLE C	CF .	•
ALPHA ( 3) =405 BETA ( 3)	= 4.025	RADIUS PHI	.000	.333 .667	
		219.999		30043041	
		225.000		30413041	
		249.999		30333080	
		270.000		3136 31773179	
· • .		מממ. ממצ		30773131	
		330.000		30%3388	
At Etal / at				.33353366	
ALPHA ( 4) = 3.873 BETA ( 1) =	- 000	radius Phi	.000	.333 .667	
		.000	2820	27242805	
		30.000		28443046	
		60.000		29292866	
		<del>9</del> 0.000		29402994	
•		120.000		28683069	
		135.000		29242959	•
		150.000		28822863	
		165.000		28372835	
•		180.000		28292773	
		195.000		28552924	
		219,999		28922956	
		225,000		28023158	
		249.999		.00002983	
		279.000		27572924	
		399,999		27242718	
		330.000		26933050	
NLPHA ( 5) = 7.989 BETA ( 1) =	.000	RADIUS PHI	.993	.333 .667	
			3095	29543114	
		30.000		30773292	
		60.993		30563106	
		90,000		39863166	
		120.000		30273144	
	•	135.000		30483102	
		159.900		30253041	
		165.000		29762998	
		180.000		29662946	
		195.000		29583095	
	•	210.000	-	29493120	
		225.000	-	29393285	
		240.000		.00003146	
		270,000	-	2888 3000	

300,000

330,000

-.2889 -.3090

-.2965 -.2928

-.2896 -.3289

פפפ.

1,400

ARC11-014TA19 OTS

SRB-NOM MES-OFF ET BASE

(REU146) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

### FARAMETRIC DATA

פפפ.

פפם.

1.000

•				_	
SREF = 2690.0000 SQ.FT.	XMRF = 976	דא. אז ספפפ.			V-18 =
LREF = 1290.3000 IN.		דץ אוו פפפפ.	•		DDER =
BREF = 1290,3000 IN.	ZMRP = 400	אז מפמפ.		· GI	MBAL =
SCALE = .0200				•	
SECTION ( 1) ET BASE		DEPENDENT VAR	TABLE CF		
ALPHA ( 1) = -8.175 BETA	(1) = .993	RADIUS PHI	,000 .333	.667	•
	•	.000	26242624	2629	
)H )H		30.000	2712	3007	
1 15		60.000	-,2703	2875	
<b>2</b> H		90.000	2695	2773	
ORIGINAL PAGE IS OF POOR QUALITY		129.999	2595		
₩.₽.		135.000	~.2631	2632	
		159.000	2632	2568	
		165,000	2597	2535	
PAGE		180.999	2582	2569	
는 밥	•	195.000	2590	2711	
<b>3</b> 5		210.000	-,2591	2676	
		225.000	2569	2797	
		249.000	בפכפ.	2731	
		270,000	2577	2657	
		300.000	2591	2944	
		330 -000	2610	2729	
ALPHA ( 2) = -4.00 BETA	(1) = .003	RADIUS PHI	.000 .333	.56?	
• .		.000	23002237	2241	
		30,000	2263		
		60,000	2260		•
•		90.000	2288		
		120.000	2252	- 2399	
•		135.000	2295	2353	
		150.000		2395	
		165.000		2276	
		180,000		2219	
		195.000	2291		
	•	219.000		- 2399	
		225.000		2384	
		240.000	מממם.		
		270.000	-,2263	2269	
		270.000	0000	0077	

300,000

330.000

-.2230 -.2233 -.2214 -.2254

ARCE1-D14TA19 OTS

SEB-NOW MES-OFF ET BASE

(REU145)

SECTI	ж. (	(1)	ET BASE			•	DEPENDENT VAR	TABLE CO		•
LEHA	( 3)	) =	348	BETA	(1)	= -4.000	RADIUS PHI	.000	.333	. 667
							פפם.	2418	~.2368	2259
							30,000		2482	2723
							60.000		2477	-,2585
							90.000		2502	2721
							120,000		2414	2598
							135.000		2442	2418
							150.000		2431	2386
					:		165.000		2377	2378
							189.999		2400	-,2323
							195.000		2394	2406
							219,999		2400	2458
							225,000		2393	2592
							249.999		.0000	2454
							270.000		2353	2303
							200.000		2238	2214
							330,000		2272	2295
ALFHA	( 3	) =	3 <del>09</del>	BETA	(2)	= ,016	RADIUS	,000	.333	.667
							FHI			
							, 200	2229	2163	2031
							. 39.000		2227	2387
							50.000		2228	2319
			•				90,000		2265	239?
							129.990		2219	2397
							135.000		2263	2261
							150.000		2254	2205
							165,000		2294	2199
							180.000		2235	2146
							195.000		2223	2319
							210.000		2231	2424
							225,000		2218	2357
							240,000		מממת.	2326
							279,000		2174	2263
							200,000		2111	2988
							330.000		2119	2122
ALPHĀ/	( 3)	) <b>z</b>	-,360	<b>SETA</b>	( 3)	= 4.028	RADIUS PHI	.000	.333	.667
							.999	2369	2334	2179
							30.000		2281	2294
						•	60.000		2265	2226
							90.000		2277	2319
							120.000		2230	2370
							135,000		2293	2431
							150.999		2257	2487
							155.999		2291	2512
							189.999		2297	2433
							195.000		2334	2495

TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

FAGE 1475

ARC11-D14TA19 OTS

SRB-NOM MES-OFF ET BASE

(REUI46)

		ARC11-014IA19 OF	S SRB-NOM MES-OFF ET BASE	
SECTION ( 1) ET BASE		DEPENDENT VA	RIABLE CF	
AT36 COE = (E ) AH7_1	(3) = 4.0	28 RADIUS PHI	.000 .333 .667	
		210.000	23552534	00
		225,090	23722599	OF OF
		249.999	.00002692	P 65
		270.000	24272523	の思
		300.000	23982497	2 ₹
		330.000	24332591	iai. or (
ALPHA ( 4) = 3.900 BETA	(.1) = ,0		.999 .333 .667	iginal page Poor qualti
		PHI		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
		ממם	222720202196	All' Si H
		30.000	21462110	정당
		60.000	22412220	02
		90.000	22632312	
		120.000	22152258	
		135.000	-,22542213	
		150.000	22372119	
		165.000	21792111	
		180.000	21932049	
		195,000 210,000	21882331	
		225.000	22112439 21962447	
		249.000	.00002364	
		270.000	21472229	
		300.000	20882058	
	•	330,000	20922051	
LPHA ( 5) = 7.653 BETA	(1) = ·,o		,999 .333 .667	
		PHI		
		.000	202320442341	
		30.00	20782411	
		69.999	21982247	
		90.000 120.000	21362326 21312235	
		135.000	21312235 21472100	
		150.000	21932964	
		165.000	20392039	
		180.000	20581922	
•		195.000	20422150	
		219,000	20302258	
		225.000	29442398	
• •		240.000	.00002359	
		270.000	20072191	
		300.000	19612031	
•		339,999	20442439	

ARC11-D141A19 OTS

SRB-OFF MFS-OFF ET BASE

(REU147) ( 94 FEB 75 )

REFERENCE DATA				•	F	ARAMETRIC	DATA	
SREF = 2690.0000 SQ.FT.       XMRP         LREF = 1290.3000 IN.       YMRP         BREF = 1290.3000 IN.       ZMRP         SCALE = .0200       .0200	= דץ או פפפפ,				ELV-IB = RUDDER = GIMBAL =	8.000 000 1.000	ELV-08 = MACH =	.000 1.400
SECTION ( 1) ET BASE	DEPENDENT VAI	RIABLE CF						
ALPHA ( 1) = -4.050 BETA ( 1)	=003 RADIUS PHI	. 222	.333	.667	•			
	.000	2938	2933	2796				
	30,000		-,2994					
	60.000			2866			•	
			2963	3152				
	129,990			3266				
	135.909		3991	3135				
	150.000		2999	3177				
	165.000		2935	3992				
•	180,999		2974	2954				
•	195.000		2972	3049				
	210.000		2944	3110				
	225.000		2963	~.3156				
	249.999	<b>.</b>	ככפפ.	3089				
	279.000		2883	~.3049				
	300,000		2778	2955				
	330.000		2966	2946				
ALPHA ( 2) =150 BETA ( 1) :	= -4.999 RADIUS	כפפ.	.333	.667				

FHI -.2819 -.2729 -.2591 כככ. -.2826 -.2969 39.000 60,000 -.2899 -.2843 -.2855 -.2907 90.000 129,999 -.2797 -.2870 135.000 -.2849 -.2829 -.2860 -.2778 150.000 -.2913 -.2762 165.000 -.2904 -.2738 189,999 -.2877 -.2830 195.000 210.000 -.2835 -.2847 -.2794 -.2975 225.000 240.000 .0000 -.2863 -.2657 -.2693 270.000 -.2574 -.2535 300.000 -.2614 -.2639 339.999

**PAGE 1477** 

ARC11-014TA19 OTS

SRB-OFF MES-OFF ET BASE

-.2552 -.2494

-.2561 -.2443 -.2552 -.2631 (REU147)

DEPENDENT VARIABLE CP SECTION ( 1) ET BASE .333 . 667 ALFHA ( 2) = -.129 BETA ( 2) = .009 RADIUS PHI -.2635 -.2572 -.2425 פפפ. -.2583 -.2716 30,000 ORIGINAL OF POOR Q -.2586 -.2689 60.000 -.2671 -.2797 90.000 -.2639 -.2735 129.999 -.2690 -.2666 135,990 150.000 -.2693 -.2619 -.2649 -.2596 165.000 L PAGE QUALITY -.2656 -.2513 180.000 -.2655 -.2651 195.000 -.2649 -.2897 210.000 -.2643 -.2891 225.000 .0000 -.2752 249.000 -.2519 -.2794 270.000 -.2428 -.2461 300.000 -.2471 -.2456 330.000 RADIUS .333 .667 ALPHA ( 2) = -.234 BETA ( 3) = 4.028 PHI .000 -.2831 -.2738 -.2680 -.2754 -.2799 30.000 60.000 -.2681 -.2819 -.2645 -.2889 99.999 120,000 -.2697 -.2937 -.2774 -.2944 135.990 150.000 -.2766 -.2912 -.2746 -.2937 165.000 -.2749 - 3045 180,000 -.2894 -.3983 195.000 -.2815 -.3136 210,000 -.2837 -.3088 225.000 .0000 -.3317 240.000 -.2978 -.2933 270.000 -.2817 -.2860 300.000 -.2779 -.3055 339.000 .333 .667 RADIUS ALPHA ( 3) = 3.867 BETA ( 1) = PHI -.2216 -.2594 .000 30.000 -.2424 -.2357 -.2593 -.2463 60.000 90.000 -.2549 -.2599 129,999 -.2524 -.2576 -.2611 -.2673 135,000 159.999 -.2531 -.2542

165.000

195.993

.

ARC11-014TA19 OTS

SRB-OFF MAS-OFF ET BASE

(REU147)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CF

ALPHA ( 3) = 3.86 BETA ( 1) = .009 RADIUS .000 .333 .667 PHI 219.999 -.2492 -.2820 -.2463 -.2762 225.000 240.000 .0000 -.2672 --.2405 -.2504 270.000 -.2352 -.2343 300,000 339.999 -.2375 -.2365

> ORIGINAL PAGE IS OF POOR QUALITY

FAGE 1479

ARC11-D14IA19 OTS SRB-NOW MPS-OFF ET BASE (REUI48) ( D4 FEB 75 )

#### REFERENCE DATA

# PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XHRF = 976.0000 IN. XT ELV-18 = 8.000 ELV-08 = .000 LREF = 1290,3000 IN. YMRF = .0000 IN. YT RUDDER = .000 MACH = 1.400 ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN. GIMBAL = 1.000 SCALE = .D2DD

#### SECTION ( 1) ET BASE

### DEPENDENT VARIABLE CF

ALPHA (1)	= -4.143	BETA	(1) =	003	RADIUS PHI	.000	.333	.667	
					.000	2254	2213	2194	٠.
					39,999		2234	2412	
					60 .000		2230	2313	
					90.000		2250	2413	
					129.999	•	2220	2345	
					135.000		2288	2337	
					150.000		2256	2281	
					165.990	•	2214	2249	
					189.999		2238	2192	
					195.000		2259	2363	
	•				210.000		2260	2371	
					225.000		2251	2355	
					249.999		בפפפ.	2395	
					270.000		2227	2220	
					300.000		2153	-,2200	
					330.000	-	2177	2237	
ALPHA ( 2)	=243	BETA	(1) =	-4.003	RADIUS Phi	.000	.333	.667	
					.000	-,2359	2273	2170	
					30.000		2375	2649	
					60,000		2373	-,2469	
					90,000		-,2380	2607	
					120,000		-,2317	2446	
					135,000		-,2353	2354	
• '					150,000	•	-,2344	- 2285	
					165,000		2340	2279	
			•		180.000		-,2329	2250	
			•		195,500		2333	2320	
*					210.000		2350	2359	
					225,000		2328		
					249,990			2397	
					270.000 270.000		.0000	2347	
							2240	2192	
					300,000	•	2167	2106	
					339.999		2173	2173	

ARC11-014TA19 OTS

SEB-NOW MES-OFF ET BASE

(REU148)

	AACL GITTINGS 213	3,3 ,13 , 7 , 7 3 3	
SECTION ( 1) ET BASE	APPAY THECHES	BLE CO	
100 = (2) =324 BETA (2) = .00	RADIUS PHI	.000 .333 .667	
		.216920651918	
	39.099	21432343	
	60.000	21792262	
•	90.000	22112332	
•	120.000	21822249	
	135.000	22012185	
	159,990	22022155	
	165.999	21612131	
	180.000	21682119	
	195,999	21682249	
•	219.999	21502357	
	225.000	21682320	
	240.000	.99992273	
	270.000	20692187	
	399,999	19882013	
	339.999	20362029	
NEPHA ( 2) =435 BETA ( 3) = 4.07		.999 .333 .667	
	FHI		
		.226922362075	
	30.000	21782191	
	60.000	21522152	
	90.000	21752213	
	120.000	21632275	
	135,000	21812341	
	150.000	21772396 21502450	
	165,000 180,000	21502450 22152446	
	195,000	22832586	
	210.000	22792713	
	225.000	22782534	
	240.990	.99992597	
	270,000	23002379	
	300 1000	22872310	
	330.000	22862497	
LFHA ( 3) = 4.032 BETA ( 1) =00	RADIUS PHI	.999 .333 .667	
		.209918822082	
4.4	39.999	20221971	
	60.000	21942981	
	ממפ. מפ	21432207	
•	120.000	20882160	
	135,000	21462115	
	150.000	21492071	
•	165.000	20832040	
	189.555	20701953	
· Commence of the commence of	105.555	2005 2015	

195,999

-.2095 -.2215

DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1481

ARC11-0141A19 O

ARC11-014TA19 OTS SRB-NOM MPS-OFF ET BASE

(REUI48)

SECTION ( 1) ET BASE

DEPENDENT VARTABLE CP

ALFHA ( 3) =	4.932 BETA	( t) =006	RADIUS PHI	.םפם.	.333	.667
			210.000		2083	~.2395
		*	225.000		2117	~.2329
			240.000		פמפק.	2257
			270.000		2012	2113
			- 300.000		1943	~.1941
			330.000		- 1970	- 1042

4.999

ספפ.

ARC11-014TA19 OTS

SRB-DFF MPS-DFF ET BASE

(REUI49) ( 04 FEB 75 )

#### REFERENCE DATA

### FARAMETRIC DATA

		•													
SREF =	269	בפפפ.ם	sa.FT.	XMRF	=	976	וא מפפפ.				ELV-18	=	8.000	ELV-OF	3 =
LREF =	129	0.3000	IN.	YME	=		וץ או פפפפ.	ī			RUDDER	=	במם.	MACH	Ξ
BREF =	129	בפפנ.ם	IN.	ZMRF	Ξ	400	וז או פפפפ.	t ·			GIMBAL	=	1.000		
SCALE =	•	.0200		_											
SECTIO	M (1)	ET BAS	ţ		,		DEPENDENT	VAR TABLE C	•						
ALPHA (	(1) =	-4.04 <b>t</b>	BETA	( 1) =	:	.000	RADIU PHI	פפפ. פנ	.333	.667					
	-						.00	003361	3420	3493			•		
•							. 30.00	פנ	3426	3662					
							60.00	פכ		3574					
							90.00			3526					
							129.00		-	3536					
							135.00			3267					
				•			150.00			3099					
							165.00			2990					
							180.00			3146					
							195.00			3510					
							210.00			3726					
					. •		225.00			3666					
							240.00			3479					
							270.00			3422					
							300,00			3430					
			•				330.00			3575					
							3301.00	1.1	5414	~.55()					
ALPHA (	(2) =	196	BETA	(1) =	-4	.003	RADIU Phi	<b>000.</b> 2u	.333	.667					
							פפ.	3491	3462	3647				•	
							30.00	מל	3539	3894					
							60.00	io (1	3601	3725					
							90,00	00	3533	3612					
							120.00	פנ	3495	3521					
							135.00		3519						
							150.00		3519						
	•						165.00		3446						
							180.90		3357						
							195,00		3395						
							210.00		3331						
							225.00	•	3427						
•		•					240.00			3883					
							240.00	-	,0000	3005					

270.000

300,000

330.000

-.3440 -.3643

-.3409 -.3525

-.3432 -.3776

FAGE 1483

			ARC	11-9141A19 OTS	i \$	RB-OFF €	4FS-OFF E	T BASE		(REU149)
SECTION ( 1)ET BASE				DEPENDENT VA	RIABLE CF	:	•			
ALPHA ( 2) =162	BETA	(5) =	.009	RADIUS PHI	בכפ.	.333	. 667			
				מפפ,	3315	3411	3038		•	
				30.000	,		-,3361			
				60,000			3189			
				פמם. מפ			3491			
				129,999			3387			
				135.000			~.3208	•		
				159,999			~.3055			
				165.000			2997			
				180.000			2933			•
				195.000			3292			
				210.000			3555			
en en en en en en en en en en en en en e				225.990			3423			
• •				240.000			3226			
				270.000			3196			
				300.000			3194			
				330.000			3219	•		
ALPHA (2) =28\$	BETA	( 3) =	4.022	RADIUS PHI	,999	.333	.667			
. •				ממס.	3393	3411	~.3438			
				20.000			3519			
				60.000			3360			
				90.000		3433				
				120.000			3628			
				135.000			3600			
				150.000		3425				
•				165.000		3237				
				180.000		3242				
•				195.000		3214				•
				210.000		3258				
				225.000		3258				
				240.000			3308			
				279.000		-,3/15				
				200.000		-,3399				
				330.000		3457		•	•	
ALFHA ( 3) = 3.828	BETA	(1)=	003	RADIUS	.999	.333	.667			
				FHI						
				.000	3261	3414	3154			
				39.999		3414				
4		•		60.000		3418				
				90.000		3297	3379			•
				120,000		3259	3314			
	•	•		135,000		3251	3294			
•				150.000		3189	3049			
				165.000		~,3155	2997	•		
				180.000		3161	2957			
•				195.000		3197	3452			
							_		•	•

AQC11-D14TA19 DTS SQB-DFF MPS-OFF ET BASE

-.3394 -.3355

(REUT49)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CO

330,000

ALPHA	( 3)	=	3.828	BETA	(1) =	003	RADIUS	.כפפ	.333	.657
							PHI			
			,				210.000		3227	3691
						•	225.000		3229	3521
					•	•	249.999		.0000	3347
							270,000		3297	3307
							300.000		- 3261	- 3192

DATE DS MAY 75

TABULATED SOURCE FRESSURE DATA - 1419 ( ARC 11-014 )

FAGE 1485

ARC11-014TA19 OTS SRB-OFF MES-OFF ET BASE

(REU150) ( 04 FEB 75 )

### REFERENCE DATA

### PARAMETRIC DATA

_REF	# #.	2690.0000 SQ.FT 1290.3000 IN. 1290.3000 IN.	=	בכיכם.	IN.	ΥŢ	•	ELV-18 = RUDDER = GIMBAL =	8.000 000 1.000	ELV-OB MACH	4,000 1,100

### SECTION ( 1) ET BASE

### DEPENDENT VARIABLE CF

ALPHA	(1)	= -	4.019	SETA	( 1	)	=	יסם.	3	radius Phi	פפפ.	.333	.667	
										בפת,	3781	3943	3944	
										30,000		~.3960	4964	
		•								60.000		3909	4245	
										סממ. מפ		~. 3931	-,4340	
										120.000		~.3995	4102	
										135,000		3931	3953	
										150,000		3912	3943	
										165.000		3849	3995	
										189.990		3855	3791	
										195.000		3913	3999	
										210.000		3947	4161	
										225,000		3995	4988	
•						•	•			249.999		,0000	4991	
										270.000		~.3931	4299	
										300.000		3772	4212	
		•								330.500		-,3834	4925	
				DCT.			_	4 00	<b>v</b> n	PUTCH	กภา	. 333	.667	
ALPHA	( 2)	=	162	BETA	( 1	1)	=	-4.00	ro co	ZUICAF THE	.000	.333	.667	
ALPHA	(2)	=	162	SETA	( 1	1)	=	-4.09	ממ	PHI		.333	.667 -,4326	
ALPHA	(2)	=	162	BETA		l)	=	-4.09	ממ	9HI .000	.000 4079			
ALPHA	(2)	=	162	SETA	( 1	1)	=	-4.00		PHI .000 50.000		4188	4326	
ALPHA	(2)	=	162	BETA		1)	=	-4.09		9HI 9999 9999 9999		4188 4297	4326 4349	
ALPHA	(2)	<b>=</b>	162	BETA		1)	=	-4.99		000.05 000.05 000.05 000.09		4188 4297 4288	4326 4340 4423	
ALPHA	(2)	- <b>-</b>	162	SETA		l)	=	-4.99		90.000 90.000 90.000 120.000		4188 4297 4289 +.4397	4326 4340 4423 4446	
ALPHA	(2)	7	162	SETA		1)	=	-4.09		FHI .000 50.000 60.000 90.000 120.000 135.000		4188 4207 4289 +.4307 4210	4326 4340 4423 4446 4315	
ALPHA	(2)	=	162	SETA		1)	=	-4.99		90.000 90.000 90.000 120.000		4188 4207 4289 +.4307 4210 4188	4325 4340 4423 4446 4315 4115	
ALPHA	(2)	=	162	SETA		1)	=	-4.99		6HI .000 50.000 60.000 90.000 120.000 135.000 150.000		4188 4297 4298 +.4397 4219 4188 4177	4326 4340 4423 4446 4315 4115 4035	
ALPHA	(2)	=	162	SETA		1)	=	<b>-4.99</b>	na	9HI .000 50.000 60.000 90.000 120.000 135.000 150.000		4188 4297 4288 +.4397 4219 4188 4177 4975	4326 4340 4423 4446 4315 4115 4035 3998	
ALPHA	(2)		162	SETA	(1	1)	=	-4 <b>.</b> 99		9HI .000 50.000 60.000 90.000 120.000 155.000 165.000 180.000		4188 4297 4288 +.4397 4219 4188 4177 4975 4112 4998	4326 4340 4423 4446 4315 4115 4035 3998 3955	
ALPHA	(2)	. <del></del>	162	SETA		1)	=	-4 <b>.</b> 90		9HI .000 50.000 60.000 90.000 120.000 150.000 150.000 180.000 195.000		4188 4297 4288 +.4397 4219 4188 4177 4975 4112 4998	4326 4349 4423 4446 4315 4115 4935 3998 3955 4948	
ALPHA	(2)	₹	162	SETA	( 1	1)	=	-4 <b>.</b> 90		9HI .000 50,000 60,000 90,000 120,000 150,000 150,000 180,000 195,000 210,000		4188 4297 4288 4397 4219 4188 4177 4975 4112 4998 4195	4326 4340 4423 4446 4315 4115 3998 3955 4048 4179	
ALPHA	. (2)	<b>4</b>	162	SETA	( 1	1)	=	<b>-4.0</b> 0		9HI .000 50,000 60,000 90,000 120,000 150,000 150,000 165,000 180,000 195,000 210,000 225,000		4188 4297 4288 +.4397 4219 4188 4177 4975 4112 4998 4195 4129	4326 4340 4423 4446 4315 4115 4035 3998 3955 4048 4179 4196	
ALPHA	. (2)	· <b>=</b>	162	SETA	( 1	1)	=	-4.00		9HI .000 50.000 60.000 90.000 120.000 150.000 150.000 165.000 180.000 195.000 210.000 225.000 240.000		4188 4297 4288 +.4397 4219 4188 4177 4975 4112 4198 4195 4129	4326 4340 4423 4446 4315 4115 4035 3955 4048 4179 4196	
ALPHA	(2)	<b>.</b>	162	SETA		1)	=	<b>-4.9</b> 9	<b>.</b>	9HI .000 50.000 60.000 90.000 120.000 150.000 150.000 160.000 195.000 210.000 225.000 240.000		4188 4297 4288 +.4397 4219 4188 4177 4975 4112 4198 4195 4129 9999 4921	4326 4340 4423 4446 4315 4115 4035 3955 4048 4179 4196 4266 4198	

ARC11-D14TA19 OTS SRB-DFF MFS-DFF ET BASE

(REU150)

SECTION ( 1)ET BASE

### DEPENDENT VARIABLE CP

3001131	OM80	•			PEREMPERT AV	TINDEC C		
ALPHA ( 2)	=141	BETA	(5) =	.012	RADIUS PHI	.000	.333	. 667
					.000	3459	3679	3795
					39.000		3677	3904
					60.000		3685	
		_			90.000		3746	
		•			120.000		3683	
•					135.000		3695	
					150.000		3654	3596
					165.000		3578	3488
					180,000		3526	_
					195.000		3511	3626
					210.000		~.3538	3794
		•			225.000		3555	3762
					240.000		0000	3880
					270.999		3482	3999
					300.000		3521	3983
	•		•		339,000		3608	3819
ALPHA ( 2)	=234	BETA	(3) =	4.025	RADIUS PHI	,000	.333	.667
	,				.000	4051	4166	4348
					30.000	.4231	4104	4254
		*			69.999		-, 4076	4207
					90.000		4578	4972
					120,000		4047	~.4167
					135.000		4117	4230
					150.000		- 4988	4295
•					165.000		4016	4254
					180.000		4929	3953
					195,000		4963	3925
					210,000		4948	4000
					225.000		4087	4951
			-		249.999		.0000	4207
	•				- 270,000		4139	4358
. •	•				200.000		4129	4355
					330.000		4155	4316
ALPHA ( 3) :	3.679	<b>SETA</b>	(1) =	.999	RADIUS PHI	.000	.333	.667
					פפפ.	3950	3977	4136
	•				30.000		4052	4235
					50.000		4015	4188
					90.000		3993	4257
					120,000		3954	4989
					135,000		-,4015	4925
					150,000		4000	3952
					165.000		3917	
			•		180,000		3935	3966
					195,000			3937
					E D D D D D D D		3924	4193





DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

PAGE 1487

ARC11-014TA19 OTS

SRB-DFF MFS-DFF ET BASE

(REUISO)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

LPHA	(-3) =	3.879	BETA	(1) =	.כפפ	ÇADIUS Phi	.000	.333	.667
						210.000		3967	4144
						225.000		3928	4080
					•	249.000		כפממ.	4958
						270,000		3894	4151
	-					399.999		3855	4049
						330.000			- 4103

1.259

ARC11-D141A19 OTS

STB-DFF MIS-OFF ET BASE

(REUI51) ( 94 FEB 75 )

#### REFERENCE DATA

### FARAMETRIC DATA

SREF = 2690.0000 \$Q.FT. LREF = 1290.3000 îN. BREF = 1290.3000 îN. SCALE = .0200	YMRF = .DMY	090 IN. XT 090 IN. YT 000 IN. ZT				ELV-IB = RUDDER = GINBAL =	8,993 ,999 1,999	ELV-OB = MACH =
SECTION ( 1) ET BASE	į	DEPENDENT VA	TABLE CF	٠.				
ALPHA ( 1) = -4.000 BETA	(i) = .999	RADIUS FHI	.000	.333	.667			
		.999 200,98	3181		3292 3434			
· · · · · · · · · · · · · · · · · · ·		59,555 69,699			3493			
		90.555			3566	·		
		129.999			3324			
		135.000			3197			
		150.000			3142			
		165.000			3132			
		189.999			2998			
		195.000		3157	3186	20		
		210.000		3128	3347	F. F.		•
•		225.000		3152	3341	Pa		•
		249.999		-0000	3365	25		
•		270.000		3115	3430	$\widetilde{\mathcal{R}}^{\widetilde{\Lambda}}$		
		399,999		~.3950		E		
		330.000		3152	3274	P. 7.		
ALPHA ( 2) = +.138 BETA	(1) = -4.993	radius Phi	.000	.333	.667	OLIGINAL PAGE IS OF POOR QUALITY		
		כמם.	3177	3123		4 12		
		39.999		3287		· O2		
		69,999		3342				
•		90.000		3353				
`		120.000		3275	*			
		135.000		3398				
• .	•	150.000		3284				
		165.000		3244				
•		189.500		3292				
		195.555 215.555		3347 3373				
		225.000		33/3 3387		•		
		249.999			3391			
		270.000		3171				
	* .	300,000		3055		•		
					10.00			

330.000

-.3099 -.3403

FAGE 1489

ARC11-014TA19 OTS

SRB-OFF MIS-OFF ET BASE

(REUI51)

SECT1	ON (	1) ET	BASE
-------	------	-------	------

#### DEFENDENT VARIABLE CP

SECTION ( 1) ET BASE	DEFENDENT VARIABLE CF
есе, = (2) ATBB \$25 = (2) АНРЈА	9 RADIUS .000 .333 .667
· · · · · · · · · · · · · · · · · · ·	.000307430973063
	30,000 -,3065 -,3227
	60.00030363086
	90.00030823288
	129.99939513192
	135.00031233172
	159.99931943975
	165,00030643056
•	180,000 -,30752924
	195.00030613068
	210.00030783160
	225.09030883144
,	249.000 .00003162
	270.00029773217
	390.99928922989
	330.00030093181
	5551555 -,555
ALPHA (2) =252 BETA (3) = 4.022	
	FHI
	.000316732233319
	30.00031913332
	60.00031423082
	1055 0805
	120,00031603417
	135.00032513427
	150,00032943406
	165.00032543393
	180.00032503275
	195,00032543298
	210.00032553306
	225,00032763297
	240.000 .00003377
•	270.00033223432
	33883388
• • • • • • • • • • • • • • • • • • •	330.00033203565
CCC. = (1) ATBE 488.8 = (5) AHGL	766. EEE. 000. 2010AF
	.999319629773963
	39.00031043306
	50,00031733104
•	
	135,900 -,3202 -,3296
	150.00031973309
	165,000 -,3:433229
	180.00031153095

195.000

-.3052 -.3175

ORIGINAL PAGE IS OF POOR QUALITY

PAGE 1490

AQC11-0141419 DTS

SEB-OFF MES-OFF ET BASE

(REU151)

SECTION ( 1)ET BASE

DEFENDENT VARIABLE CF

agpha (3)	= 3.864 BETA	(1)=	.000	radius Phi	פפס.	.333	.657
				210,000		3030	3190
				225,000		3034	3451
				240,000		מפפת.	-,3214
				270.000		2995	~.3169
				300,000		2972	2982
				330,000		- 2967	3351

. . . . . .

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1491

4.999

1.499

ARC11-014TA19 OTS

SRB-OFF MS-OFF ET BASE

(REUIS2) ( 04 FEB 75 )

FARAMETRIC DATA

8.000



#### REFERENCE DATA

SQEF = 2690.0000 SQ.FT. XMQF = 976.0000 IN. XT YMRF = TY .NI CCCC. LREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT BREF = 1290.3000 IN.

.000 RUDDER = GIMBAL =

ELV-IB =

1,000

SECTION ( 1)ET BASE

### DEPENDENT VARIABLE CF

ALFHA ( 1) = -3.990 BETA ( 1) = .000	radius Phi	.000	.333	.667
	.000	2784	2759	2819
•	39,999		2776	3174
	60.000		2810	2893
	90.000		2864	2991
	120.000		2860	2930
	135.000		2911	2913
	150.000		2885	2832
	165.000		2838	2787
	180.000		2823	2897
	195,000		2820	2899
	210.000		2795	2927
	225.000		-,2795	3169
	249.999		בכככ.	3029
	270,000		2751	2999
	300,000		-,2690	2866
	330.000		-,2729	2852
ALPHA ( 2) =195 BETA ( 1) = -4.003	RADIUS PHI	,000	.333	.667
	.,000	2845	2769	2641
	39.993		2823	3014
	60.000	_	2815	2873
•	90,000	•	2859	2995
	120,000		2792	2842
	135.000		2848	2913
	150.000		2879	- 2993
	165,000		2801	2866
	180,000		2915	2756
	195.000		2882	2835
	210.000		2827	2819
	225,000		2790	2945
	249.093		פפפס.	2887
	279.000		2656	2791
	300.000		2600	2552
	330.000		2572	2621
· · · · · · · · · · · · · · · · · · ·				

ORIGINAL PAGE IS OF POOR QUALITY

ARC11-0141A19 OTS SRB-OFF MFS-OFF ET BASE

(REU152)

SECTION ( 1) ET BASE

### DEPENDENT VARIABLE CP

N_PHA	( 5)	=	198	BETA	( 5)	=	.009	RADIUS PHI	.ססס	.333	.667
								כפפ.	2618	2547	2418
								30,000		2588	2712
								60.000		2565	2662
								90.000		2649	2791
								129.000		2656	2723
								135.000		2703	2569
• .								150.000	•	2678	2630
								165.000		2634	2696
				-				180.000		2647	2597
	•							195 .000		2633	2648
								210.000		2650	2817
	100							225.000		2644	2931
											2745
							•	249.000		.0000	2793
								270,000		2516	
								300.000		2422	2451
								339.000		2483	2491
ALPHA	( 2)	=	186	BETA	( 3)	=	4.922	RADIUS	.000	.333	.667
								FHI	·		
									2795	2754	2659
								30.000		2717	2750
								60.000		2619	2898
								90.000		2614	2855
								129.993		2683	2927
								135.000		2734	2930
								150.000		2716	2913
								165.000		2697	2936
								180.000		-,2740	2991
								195.999		2786	-,3029
								219,999		2797	3133
			•					225.000		2896	3966
								249.999		.0000	3321
								270.000		2812	2999
				•				300.000		2819	2836
					•			330.999		2747	3055
LPHA	( 3)	=	5.960	BETA	( 1)	= .	.999	RADIUS PHI	.000	.333	.667
				•				ממפ.	2468	2224	2493
								30.000		2388	2355
							•	60.000		2473	2449
								ממם, מפ		2514	2549
							•	120,000		2462	2521
								135.000		2567	2566
								150.000		-,2550	2513
								165.000		2518	2445
								180.000		2495	2376
								195,999		2471	2540
								193.000			2549

TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

PAGE 1493

ARC11-014TA19 OTS

SRB-CFF MPS-OFF ET BASE

(REUI52)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CF

NUPHA ( )	5) =	3.960	BETA ( 1) =	.000	RADIUS	.000	.333	.667
					210.000		2457	2875
					225.000		2460	2755
					249,000		כפפפ.	2653
					270.000		2412	2474
					300.000		2349	2318
					330 000		2340	2337

ORIGINAL PAGE TO

PAGE	1	49
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ARC11-D14TA19 OTS

SEB-NOW MES-OFF ET BASE

(REU153) ( 04 FEB 75 )

DFF	Fo	tw	F	DA	۲A

SREF	=	2690.0000 9	g.FT.	XMRF	=	976.0000	IN.	XT
LREF	=	1290.3000 1	IN.	YMRF	=	כפכם.	IN.	YT
BREF	=	1290.3000 1	IN.	ZMRP	=	499.9999	IN.	ZT
	-	noon						

FARAMETRIC DATA

4.000 ELV-IB = 8.000 ELV-08 = .900 פפפ, RUDDER = GIMBAL = 1.000

SECTION ( 1) ET BASE

#### DEPENDENT VARIABLE CP

					667
ALPHA ( 1) = -4.179 BETA	(1) =00	RADIUS PHI	כפפ.	.333	.667
		.000	~.3594	3540	3712
		30.000		3644	3881
		60.000		3729	3816
	•	000.00		3792	3549
		120,000		3620	3562
		135.990		3583	3311
•		150.000		3553	~.3098
		165.090		3500	3963
		180.000		3399	3351
		195,000		<b>3479</b>	3688
		210.000		3481	3942
		225,000		3559	3855
		240.000		בפתם.	3633
and the second second second		270,000		3570	3593
		300.000		3634	3599
		330.000		3585	3816
ALPHA ( 2) =339 BETA	(1) = -3.99	7 RADĪUS	.900	.333	.667
ALPHA ( 2) =339 BETA	(1) = -3.99	RADIUS PHI	מכפ.	,333	.667
ALPHA ( 2) =339 BETA	(1) = -3.99	•	.000	.333 3690	
ALPHA ( 2) =339 BETA	(1) = -3.99	FHI			3700
ALPHA ( 2) =339 BETA	(1) = -3.99	THT CCC.		3690	3799 3986
ALPHA ( 2) =339 BETA	(1) = -3.99	PHI .000 30.000		3690 3775	3799 3985 3812
ALPHA ( 2) =339 BETA	(1) = -3.99	PHI .000 .000.00 .000.00		3699 3775 3697	3700 3986 3812 3738
ALPHA ( 2) =339 BETA	(1) = -3.99	FHI .000 000.00 000.00 000.00		3690 3775 3697 3684	3700 3986 3812 3738 3619
ALPHA ( 2) =339 BETA	(1) = -3.99	PHI .000 30,000 60,000 90,000 120,000		3690 3775 3697 3684 3605	3700 3986 3812 3738 3619
ALPHA ( 2) =339 BETA	(1) = -3.99	PHI .000 30,000 60,000 90,000 120,000 135,000		3690 3775 3697 3684 3605 3564	3700 3986 3812 3738 3619 3465 3339
ALPHA ( 2) =339 BETA	(1) = -3.99	PHI .000 30,000 60,000 90,000 120,000 135,000 150,000		3690 3775 3697 3684 3605 3564 3568 3572	3700 3986 3812 3738 3619 3465 3339
ALPHA ( 2) =339 BETA	(1) = -3.99	FHI .000 30.000 60.000 90.000 120.000 135.000 150.000		3690 3775 3697 3684 3605 3564 3568 3572	3700 3986 3812 3738 3619 3465 3339 3208 3222
ALPHA ( 2) =339 BETA	(1) = -3.99	FHI .000 30,000 60,000 90,000 120,000 135,000 150,000 165,000		3690 3775 3697 3694 3605 3564 3568 3572 3455	3700 3985 3912 3738 3619 3465 3339 3208 3222 3492
ALPHA ( 2) =339 BETA	(1) = -3.99	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 180.000		3690 3775 3697 3684 3605 3564 3568 3572 3455 3441	3700 3985 3912 3738 3619 3465 3339 3208 3222 3492
ALPHA (2) =339 BETA	(1) = -3.99	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 180.000 210.000		3690 3775 3697 3684 3564 3564 3572 3455 3455 34518 3518	3700 3985 3812 3738 3619 3465 3339 3208 3222 3492 3771
ALPHA (2) =339 BETA	(1) = -3.99	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 189.000 210.000		3690 3775 3697 3684 3564 3564 3572 3455 3455 34518 3518	3700 3985 3812 3738 3619 3465 3339 3208 3222 3492 3771 3848 3977
ALPHA (2) =339 BETA	(1) = -3.99	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 189.000 195.000 225.000		3690 3775 3697 3684 3564 3564 3572 3455 3455 34518 3518	3700 3985 3812 3738 3619 3465 3339 3208 3222 3492 3771 3848 3977
ALPHA (2) =339 BETA	(1) = -3.99	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 180.000 210.000 225.000 240.000		3690 3775 3697 3684 3564 3564 3572 3455 3441 3518 3516 0000 3617	3700 3985 3812 3738 3619 3465 3339 3208 3222 3492 3771 3848 3977 3735

OF POOR QUALITY

PAGE 1495

-.3195 -.2930

-.3193- -.3419

(REU153)

	ARC11-D14TA19 OTS	SRB-NOM MFS-OFF ET BASE	
SECTION ( 1)ET BASE	DEPENDENT VARIABLE	Ţ.	
ALFHA (2) =369 BETA (2) :	CCC. 2010AF 21C. =	.333 .667	
	=	33153193	
	39.999	34013537	
	60.000	33733389	
	000.00	33163556	
	120.000	32433598	
	135.000	32133274	
	150,000	31323982	
	165,000	31362921	
	180,000	32563001	
•	195,000	32553286	
	210,000	33253617	
	225,000	33353501	
	240.000	.00003375	
	270.000	33153332	
	300.000	33213227	
	330,000	33273348	
ALGHA ( 2) =411 BETA ( 3) :	= 4.022 RADIUS .000	.333 .667	
	FHI		
	.0003471	35823578	
	30.000	34563717	
	60.000	34913498	
	90.000	35193577	
*	120.000	35803842	
•	135.000	35983718	
	150.000	35403591	
	165.000	34333691	
	180.000	34153542	
	195,000	33363113	
	210.000	32933254	
	225.000	34163327	
	240.000	.00003439	
	270,000	34853659	
	300,000	~.35333580	
	330.000	35723754	
ALPHA ( 3) = 3.936 BETA ( 1) =	CCC. 2UICAF 300	.333 .667	
	1 (라마		
	.9093325		
	30,000	33663381	
	60,000	34283258	1
•	90,000	32973478	
	120,000	32313447	
	135,000	31553293	
	150.000	31743129	
	- 165.000	30952975	

190,000 195,000

ARC11-0141A19 OTS SRB-NOM MPS-OFF ET BASE

(REUI53)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) = 3.936 BETA ( 1) =006	\$401US .ccc. ccc. 2010App
	219,00032433660
	225.00032463477
	249.000 .00003294
	270.00032553285
	300.00032603213
	330.00032883275

( )

DATE 03 MAY 75

MANAGEMENT THE PROPERTY OF

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1497

4.999

ARC11-D14TA19 OTS

SRB-NOW MES-OFF ET BASE

.0000 -.3945

-.3773 -.3869 -.3739 -.4124

-.3919 -.4937

(REUIS4) ( D4 FEB 75 )

### REFERENCE DATA

### FARAMETRIC DATA

	=	1290 1290	פפפצ.		XMRF YMRF ZMRF	. =		בם כם.	IN. 3 IN. 3	rT .				•	ELV-19 RUDDER GIMBAL	=	000.8 000. 1.000	ELV-0 MACH	)B = =
2501	TON	/ 439	ET BAS					DEC	ENDEN.	r uin	TABLE CF								
SECI	1.7.A		EI GA	)C			•	551	CIANCIA	YAK	ואטבע כויי								
ALFHA	(	1) =	-4.149	BETA	(1)	=	.000		RAD'		.000	.333	.667						
									.!	. ממכ	3595	3720	3659					**	
			1. 1						30.	פפפ		. ~.3727	3790						
			•						60.	פפפ			3918						
									90.9				4978						
									120.	מפפ			3923						
							•		135.	מפס			3850						
									150.9	פפס		3658	3779						
									165.				3724						
									180.9				3693						
									195.				3787						
									210.9				3876						
		4							225.	מממ			3897						
									240.9	מנינ			3921						
									279.9				4005						
		•							300.0	ממנ			3977						
									330.9	ממנ		3564	3749						
ALPHA	( 2	2) =	31	BETA	(1).	= -4	.003		RAD	lus	.999	. 333	.657						
									FHI										
										מפנ	3805		4058						
					•				39.9				4090						
									60.5				4131						
									99.0			4000							
									120.0			3849					•		
									135.0			3839							
									150.5			3848							
					••				165.0				3736						
									180.0				3655						
					•				195.5				3789						
									210.0			3919							
									225.0	ספו		3951	3926						

249.999 · 279.999

300.000 330.000 ARC11-014TA19 OTS

STB-NOW MPS-OFF ET BASE

(REUI54)

SECTION ( 1)ET BASE	DEPENDENT VARIABLE CP
ALPHA (2) =327 BETA (2) = .000	5 RADIUS .000 .333 .667 PHI
	.000322834363566
	30.00034893681
	60.00034993672
	90.00035343757
	120.00034733545
	135.00034553331
	150.00034213279
	165.00033443244
	189.99932773219
	195.00032733409
	219.00032933548
	225.90033143543
	249.999 .99903679
ALPHA ( 2) =288 BETA ( 3) = 4.016	RADIUS .000 .333 .667
	PHI
•	.909375338474924
	30.00038424006
	60.00037543928
	90.00037723736
	120.00037333855
	135.09037773930
	150.00037423918
	165.00037033948
	180.00037313606
	195.00037483594
	210.00037313662
	225.99037493794
	240.0003849
	270.00039373943
	300.90039084007
	339.00039654026
NUFHA (3) = 3.919 BETA (1) =003	RADIUS .990 .333 .667
	.000363436553758
	30.00036943892
	60.00035723929
	90.00037113862
• •	120.00036153769
	150.00036753744 *
	165.0003658
	180,00035053524

195,000

-.3520 -.3795



DATE 93 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1499

ARC11-014TA19 OTS STB-NON MES-OFF ET BASE

-.3569 -.3808

(REUISA)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

339,999

ALPHA ( 3) = 3.915	BETA	(1) =003	RADIUS	.999	.333	.667
			PHI			
			210.000		3612	3809
			225.000		3599	3734
			249.999		.0000	3712
			270.000		3575	3778
•			300.000		3547	3659

PAGE 1500

1.250

ARC11-D14TA19 OTS

SRB-NOM MES-DEF ET BASE

(REUISS) ( 94 FEB 75 )

8.000 ELV-08 =

= אא מפת,

### REFERENCE DATA

## PARAMETRIC DATA

1.000

ELV-IB = RUDDER =

GINBAL =

EF = 2690.0000 SQ.FT.		90 IN. XT	•
EF = 1290.3000 IN.	****	OO IN. YT	
EF = 1290,3000 IN. NE = .0200	ZMRP = 400.00	מו פפו דג. או פפו	
CTION ( 1) ET BASE	פ	EFENDENT VARIABLE CP	
PHA ( 1) = -3.981 BETA	(1) = .999	RADIUS .000	.333 .667
		PHI	2015 2016
			29162946
		30,000	29633084
		60,000	29353140
		םממים פ	29383131
		120.000	29812947
		135.000	28852848
		150,000	28902804
		165.000	28192744
		180.000	28192711
		195,000	28212997
		210.000	29112983
		225.000	28292939
		240.000	.00002974
		270.000	26063039
		300.000	27292929
•		330.000	28292919
PHA ( 2) =369 BETA	(1) = -4.000	RADIUS .000 PHI	.333 .667
		.0002879	28432943
•		30.900	30103259
		50.000	39233963
		90,000	30063046
		120.000	28792914
		135,000	29262984
		150.000	29022821
		165.000	29992837
		189,000	29452848
		195,000	29862980
•		210.000	30263059
		225.000	30193059
		240.990	.00002991
		270.000	28492907
•		300,000	27532739
•		330,000	27953135
		المالية الرار	-10122 12424

PAGE 1591

SRB TZ TC-11014TA19 OTS SRB-NOW MPS-OFF ST BASE

(REU155)

SECTION ( 1)ET BASE	DEPENDENT V	RIABLE C	p.		
ALFHA ( E) =309 BETA ( 2) = .012					
1973 PELV (5) = 1915	RADIUS PHI	בכפ.	.333	.667	
	.000	-,2697	2551	2679	
	39.999		2795	2877	ů.
	50.00 <u>0</u>		2678	2772	
	90.000		2727	2899	
	129.999		2679	2861	
	135.999		2714	2788	
	150.000		2722	2791	OF OF
	165.000		2660	2672	
	180,999		2689	2561	IGNAI Poor
	195.000		2670	2697	2 B
	210.000		2693	2788	2; £
	225.000		2693	2775	L .
	249.000		מפפם.	2804	QU QU
	279.999		2612	2844	- II
	300.000		2547	<b>~.263</b> 0	45
	330,000		2631	2858	PAGE QUALIT
ALPHA ( 2) =300 BETA ( 3) = 4.022	RADIUS	, 999	. 333	.667	N 55
	PHI				
	.000	2913	2880	3023	
	30.000		2862	3058	
	60.000		2845	2813	
	90.000		2861	2877	
	120.000		2993	2999	_
	135.000		2967	3016	
. •	150,000		3004	3027	
	165.999		2971	3019	
	199.000		2912	2951	
	195.000		2912	2945	
	210.999		2999	2951	
	225.999		2915	3036	
	249.000		.0000	3113	
	270,000		2974	3092	
	300.000			3039	
	330.000		2975	3282	
ALPHA ( 3) = 3.966 BETA ( 1) = .003	RADIUS FHI	.000	.333	.657	
	.000	2761	2654	2799	
and the state of	30,000			2921	
	60.000			2760	
	90.023			2898	
	120.000			2898 3024	
	135.000				
	150.000			3995	
	155.000			2997	
	199.999			2852	
	195.000			2735	
		•	-,2141 -	2934	

ARC11-014TA19 OTS STB-VON YES-OFF ET BASE

(REU155)

SECTION ( 1)ET BASE

### DEPENDENT VARIABLE CF

ALPHA ( 3)	= 3.966	BETA ( 1) =	.003	RADIUS CHI	במם,	.333	.667
		•		210.000		2728	2848
				225,000			2974
•				240.000		ממממ.	2837
				270.999		2632	2808
		• •		300.000		2513	2629
٠.				330.000		2641	2917

DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1593

ARC11-014TA19 OTS

SRB-NOM HES-OFF ET BASE

(REU156) ( D4 FEB 75 )

PARAMETRIC DATA

8.999 ELV-08 =

#### REFERENCE DATA

 SREF
 =
 2690.0000 SQ.FT.
 XMRF
 =
 976.0000 IN. XT

 LREF
 =
 1290.3000 IN.
 YMRF
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN.
 ZMRF
 =
 400.0000 IN. ZT

RUDDER = .000 MACH = GIMBAL = 1.000

ELV-IB =

SCALE = .0200

#### SECTION ( 1) ET BASE

### DEPENDENT VARIABLE CP

ALPHA ( 1)	= -4.971	BETA	(1) =	.000	RADIUS	ממם.	.333	.667
					PHI			
					פפפ.	2297	2182	2178
					30.000		2211	2409
					60.000		2218	2291
					90.000		2254	2395
			1		129.000		2219	2342
					135.990		2265	2312
					159.999		~.2263	2231
					165.999		2228	2215
					189.999		2231	2202
					195.000		2219	2337
					210.999		2223	2365
	•	•			225.000		2218	2351
					240,000		כממם.	2288
					270.000		2293	2236
					300.000		2132	2179
					330.000		2121	2232
					•			
ALPHA ( 2	) =294	BETA	(1) = -	4.000	RADIUS	.000	. 333	.667
ALPHA (2	) =294	BETA	(1) = -	4.000	PHI			
ALPHA (2	) =294	BETA	(1) = -	4.000	PHI .000	2319	2263	2110
ALPHA (2	) =294	BETA	(1) = -	4 .990	PHI .000 30.000		2263 2365	2110 2642
ALPHA (2	) =294	BETA	(1) = -	4 .000	PHI .000 30.000 60.000		2263 2365 2343	2110 2642 2417
ALPHA (2	) =294	BETA	(1) = -	·4 <b>.</b> 999	PHI .000 30.000 60.000 90.000		2263 2365 2343 2364	2110 2642 2417 2596
ALPHA ( 2	) =294	BETA	(1) = -	4.000	90.000 120.000 120.000 120.000		2263 2365 2343 2364 2292	2110 2642 2417 2596 2429
ALPHA ( 2	) =294	BETA	(1) = -	·4 ·999	FHI .000 30.000 60.000 90.000 120.000		2263 2365 2343 2364 2292 2312	2110 2642 2417 2596 2429 2318
ALPHA ( 2	) =294	BETA	(1) = -	-4 .999	PHI 000 30,000 00,000 90,000 120,000 135,000 150,000		2263 2365 2343 2364 2292 2312	2110 2642 2417 2596 2429 2318 2272
ALPHA ( 2	) =294	BETA	(1) = -	4 . 900	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000		2263 2365 2343 2364 2282 2312 2324 2285	2110 2642 2417 2596 2429 2318 2272 2250
ALPHA ( 2	) =294	BETA	(1) = -	4 . 999	PHI .000 30.000 60.000 100.000 120.000 150.000 165.000 180.000		2263 2365 2343 2364 2292 2312 2324 2285 2304	2110 2642 2417 2596 2429 2318 2272 2250 2257
ALPHA ( 2	) =294	BETA	(1) = -	4 . 999	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 165.000 180.000		2263 2365 2343 2364 2292 2312 2324 2285 2304 2310	2110 2642 2417 2596 2429 2318 2272 2257 2257 2296
ALPHA ( 2	) =294	BETA	(1) = -	4 . 900	PHI .000 30.000 60.000 90.000 120.000 135.000 165.000 180.000 195.000 210.000		2263 2365 2343 2364 2292 2312 2324 2285 2304 2310 2296	2110 2642 2417 2596 2429 2318 2272 2257 2257 2296 2340
ALPHA ( 2	) =294	BETA	(1) = -	4 . 900	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 160.000 180.000 210.000 225.000		2263 2365 2343 2364 2282 2312 2324 23285 2304 2310 2296 2287	2110 2642 2417 2596 2429 2318 2272 2250 2257 2257 2296 2340 2398
ALPHA ( 2	) =294	BETA	(1) = -	4 . 900	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 160.000 195.000 210.000 225.000		2263 2365 2343 2364 2292 2312 2324 2285 2374 2310 2296 2287	2110 2642 2417 2596 2429 2318 2272 2257 2257 2296 2340 2398 2310
ALPHA ( 2	) =294	BETA	(1) = -	4 . 900	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 160.000 195.000 210.000 225.000 240.000		2263 2365 2343 2364 2292 2312 2324 2324 2364 2310 2296 2287 0000 2245	2110 2642 2417 2596 2429 2318 2272 2257 2257 2257 2296 2340 2398 2310 2190
ALPHA ( 2	) =294	BETA	(1) = -	4 . 990	PHI .000 30.000 90.000 90.000 120.000 135.000 150.000 160.000 195.000 210.000 225.000 240.000		2263 2365 2343 2364 2292 2312 2324 23296 2310 2296 2287 .0000 2245 2155	2110 2642 2417 2596 2429 2318 2272 2257 2257 2296 2340 2398 2310 2190 2190
ALPHA ( 2	) =294	BETA	(1) = -	4 . 990	PHI .000 30.000 60.000 90.000 120.000 135.000 150.000 160.000 195.000 210.000 225.000 240.000		2263 2365 2343 2364 2292 2312 2324 2324 2364 2310 2296 2287 0000 2245	2110 2642 2417 2596 2429 2318 2272 2257 2257 2257 2296 2340 2398 2310 2190

OF THE PARTY OF TH

ARC11-0141419 OTS

STB-NOW MES-DEF ET BASE

(REU156)

SECTION		FT	RACE
30017.31	۱. A.	151	DASE

### DEPENDENT VARIABLE CP

					-		`		
ALPHA ( 2)	=375	BETA	( 5)	=	.009	RADIUS Phi	.000	.333	. 667
						בככ.	2188	2118	1923
				٠		39,909		2198	2354
				•		60.000		2208	2286
						90.000		2235	2319
	•					129.900		2215	-,2258
						135.000		2225	2214
						150.000		2214	~.2186
	. •					165.999		~.2189	2156
						180.000		~.2297	2119
						195.000		2209	2289
						210.900		2201	2374
						225.993		2219	2349
						240.000		מפפפ.	~.2267
						270.999		2121	2223
						300.000		2958	2036
		•				330.000		2095	2078
ALPHA ( 2)	=423	BETA	( 3)	=	4.028	RADIUS	.000	.333	.667
						FHI			
						מפס.	2286	2249	2079
						39.999		2156	2174
						60.000		2167	2143
						90.000		2193	2291
						120.000		~.2193	2295
						135.900		2171	2318
						150.000		2154	2491
						165.000		2291	2448
						180.000		2253	2340
						195.000		~.2273	2345
						219.999		2301	2428
	•					225,000		2298	2498
						240.000		פפפק.	2569
						270.000		2311	2386
						300.000		-,2289	2286
			•		•	330.000		2292	2495
ALPHA ( 3) :	= 3,834	BETA	(1)	=	~.003	RADIUS	.000	.333	.667
			•			7HI		-	
						.000	2191	1932	2054
						30.000		2040	1988
						60.000		2994	2058
	•					90.000		2163	2225
						120.000		2111	2184
	•					135,000		2150	2131
						150.000		2139	2092
						165.000		2097	2056
						180.000		-,2102	1979
						195,000		2115	2215
•						8 2 2 4 4 FE			

DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-914 )

FAGE 1505

ARC11-014TA19 OFS SEB-NOW MES-DEE ET BASE

(REU156)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

ALPHA (	3) =	3.834	BETA	(1) =0	193	RADIUS	.000	.333	.667
						PHI			
						210.000		2093	2382
						225.000		2093	2315
**						249.999		בפכפ.	2239
						270.000		2030	2133
						300.000		1961	1946
						330,000		- 1974	- 1934

## ARC11-D14TA19 OTS+STRUT SRB-NOM+ET BASE (REUIS7) ( D4 FEB 75 )

### REFERENCE DATA

#### PARAMETRIC DATA

TEE =	2690.0000 5Q. 1290.3000 IN. 1290.3000 IN.	FT. XMRP YMRP ZMRP	=	פפפם.	IN. XT IN. YT IN. ZT					elv-18	=	0.000, 000, 000,1	ELV-08		4.000 1.250
SECTION	( 1) ET BASE			DEF	ENDENT VA	RIABLE CP									
ALPHA (	1) = -4.497 B	ETA (1) =	: .003		RADIUS PHI	.000	.333	.667							
	•			•	פפפ.	2885	2883	2912	• *						
					30,000		2951	3069							
					50 .000		2946	3015							
					90.000	•	2922	3109							
		•			120,000		2847	2950							
					135.000		2857	2885							
					150.000		2841	2864							
					165.000		2765	2849							
					180.000		2863	2794							
			•		195.000		2853	2998							
					210.000		~.2856	3957							
					225.000		2874	3938							
					240,000		מממם.	2993							
	•				270.000		2815	2974							
					300.000		2778	2916							
					330.000		-,2853	2895	٠,						
	•									•					
ALPHA (	2) =339 B	ETA (1) =	-3.997		RADIUS ≃HI	.000	.333	.667							
					מפס.	2792	2927	2960							
					39.990		2819	3091							
					60.000		2842	2843							
					90,000		2889	2945							•
					129.999		2835	2963							
					135,000			3020				•			
					150,000			3187							
					165.000			3194							
					189,999			2932							
					195,000		-	2879							*
	•				210.000	•		2793							
	•				225.000			2779				•			
					240.000			2749						1	
	•				270.000			2817							
					300,000			2925							
								2930							
					330.000		2115	2933							



DATE OF MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-NOAHMES-NOH+ET BASE

(REU157)

				ARC	11-D141A19	DIS+SIGN S	43-4347M	-2-14JF4-C1	U
SECTION ( 1) ET BASE	<u>.</u>				DEPENDENT	VARIABLE CF			
ALPHA ( 2) =465	BETA	( 5)	=	.019	RADIU PHI	כככ. א	.333	. 667	
*	٠.				.00	ng2631	2621	2672	
					30.00		2670	2853	
					60.0		2664	2754	
					90.00		2699	2967	
					129.9		2651	2717	
					135.0	פפ	2653	2659	
					150.09	on ີ	2647	2641	
					165.0	מפ	2696	2612	
					180.0	פפ	2615	2541	
					195.0	ממ	2697	2781	
					219.9	99	2617	2827	
					225.0	מפ	2623	2816	
					240.0	מפֿ	ממפת.	2792	÷.
		•			270:0	99 -	2579	2811	
					300.0	99	2539	2695	
					330.0	ממ	-,2617	2761	
ALPHA ( 2) =435	BETA	( 3)	=	4.931	RADI PHI	000. <i>2</i> U	.333	.667	
					0	002764	2788	2944	
					30.0		2739	2994	
					60.0		2750	2922	
					90.0			2893	
			•		120.0		2693	2754	
					135.0		2693	2697	
					150.0		2699	2697	
					165.0		2651	2779	
					180.0		2721	2699	
				•	195.0		2746	3160	
•					210.0		2815	3152	
					225.0		2843	3057	
					240.0		.0000	3030	
					270.0		2877	2910	
					300.0		- 2923	2952	
					330.0		2785	3071	
ALPHA ( 3) = 3.638	BETA	( 1)	) <u>=</u>	.003	RADI	פכפ. אט	.333	.667	
					PHI .0	9992715	2607	2686	
		*			30.0		2729	2994	
	-1				60.0			2750	
•		•			90.0		2774	-,2943	•
					120.0		2711	2813	
					135.0		2735	2783	
					150.0		2729	2724	•
en de de la companya de la companya de la companya de la companya de la companya de la companya de la companya					165.9		2570	2598	
					180.0		2578	2554	
**					195.0			2895	
					193.2	r.v.i	-,2013	2003	

ARC11-014TA19 OTS+STRUT SRB-NON+MES-NON+ET BASE

(REUIS7)

SECTION ( 1)ET BASE

DEPENDENT VARIABLE CP

ALPHA ( 3) =	3.636	BETA	(1) =	.003	RADIUS PHI	.000	.333	.667
					•			
					210.000		2686	2901
	• •				225.000		2697	2865
		• "			240,000		פפפפ.	2905
					279.999		2619	2779
					399.990		2580	2595
		•			330 000		~ 26/15	_ 2877





DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

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ARC11-014TA19 OTS+STRUT SRB-LOW MPS-NOW ET BASE

(REUIS8) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT

## FARAMETRIC DATA

_REF = 129 BREF = 129 BCALE =			YMRF =			IN. YT IN. ZT			
SECTION (	1) ET BASE				DEP	ENDENT VAR	TABLE CF		
ALPHA (1)	= -4.155	BETA	(1) =	.000		RADIUS PHI	. מממ	.333	.667
						.000	2385	2363	2392
						30,000		2492	
						60.000		2372	
	•					90.000		2443	2612
						120.000		2418	
						135.000		2455	
						150.000		2454	
						165.000		2424	2489
					•	180.000		2430	
						195,000		2437	
						210.000		2496	
						225,000		2426	2572
						249.999		בפפפ.	
						270,000		2391	
						300.000			2499
	•					330.000		2339	2419
LPHA ( 2)	=342	BETA	(1)=	4.928		RADIUS PHI	.000	.333	.667
						.000	2379	2387	2390
		•				30.000		2325	2389
						60,000		2310	2398
			•			90,000		2260	2329
					-	120,000		2273	2327
						135.999		2321	2325
	r i i i i i i i i i i i i i i i i i i i					150.000			2384
						165.000		2314	
						180.000		2355	2321
						195,000			2656
				*		210.000			2842
						225.000			2845
			•			240:000			2909
						270.000		2525	

300.000

330 .000

-.2491 -.2477

-.2418 -.2501

ELV-DB = ELV-IB = 8.000 1,400 .000 MACH = RUDDER = 1.000 GIMBAL =

4,999

1.250

ARC11-014IA19 OTS+STRUT SRB-NOW MES-OFF ET BASE

(REUIS9) ( D4 FEB 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

## PARAMETRIC DATA

8,000 E(V-OB =

E\_V-18 =

SREF = LREF = BREF = SCALE =	2690,0000 5 1290,3000 1 1290,3000 10000,0000	IN.		=	77 .NI 0000. TY .NI 0000. TS .NI 0000.				ELV-18 = RUDDER = GIMBAL =	000. 000. 000.1
SECTION	( 1) ET BASE				DEPENDENT VAI	RIABLE CF	; ;			
ALPHA (	1) = -4.989	BETA	(1) =	.012	RADIUS	.000	.333	.667		
					PHI					
					.000	2878	2917	2997		
	•				30.000			3110		
					60.000			3102		
					20.000		2980	3137		
					120.000		2920	2978		
	100				135,000		2925	2918		
					159.990		2999	2855		
•			•		165.000		2856	2818		
					180.000		2974	2769		
					195.000		2844	2993		
					210.000		2842	3113		
					225.000		2853	3091		
					249.990		פכפפ.	3949		
					270.000		2821	3959		
					300,000		2796	2952		
					330.000		2851	2918		
ALPHA (	2) =375	BETA	(1) =	.012	RUIDAF	.000	.333	.667		
					PHI :					
					.999	2618	2602	2579		
					30.000		2652	2773		
					60.000		2639	2694		
					90.000		2679	2875		
					129.999		2619	2727		
·					135.000		2641	2691		
					159,990		2511	2648		
					165.000		2554	2518		
					180,555		2594	2592		
					195.000		2697	2750		
					210.000		2528	2821		
	•				225.990		~.2635			
					240.000			2727		
					270.000		2544			
	4 124				300,000		2519			
					330.000		2551			

DATE 53 HAY 75

TABULATED SOURCE PRESSURE DATA - TAIS ( ARC 11-014 )

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ARCTI-DIATATE OTS-STRUT SRB-NOM MES-OFF ET BASE

(REU159)

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CO

		333			

radius Phi	מכני.	.333	. 667
.000	2852	2858	3000
30,000		2830	2989
60 7000		2839	2973
90.000		2895	2872
120.000		2743	~.2990
135.990		2775	2767
150.000		2775	-,2842
165.000		2754	2842
180.000		2800	2817
195,000		2835	3229
210,999.		2876	3294
225,000		2925	3228
240.000		פפפפ.	3238
270,000		2974	3011
300.000		2933	2959
330.000		-,2907	3155

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PAGE 1512

ARC11-0141A19 OTS+STRUT SEB-HT MFS-WOM ET BASE

(REU160) ( 04 FE9 75 )

## REFERENCE DATA

PARAMETRIC DATA

SREF	-	2690.0000 SQ.FT.	XMRF	. =	976.0000	IN.	ম
LREF	=	1290.3000 IN.	YMRF	=	ממפת.	IN.	YT
BREF	=	1290.3000 14.	ZMRF	=	400.0000	IN.	ZT

4,000 8,000 ELV-08 = ELV-19 = 1.259 RUDDER = GIMBAL = MACH CCD, 1.000

SCALE = .0200

SECTION ( 1) ET BASE

DEPENDENT VARIABLE CP

ALFHA ( 1) = -4.122	BETA	(1) =	.012	RADIUS PHI	פפס.	.333	.657
				בממ.	~.2380	2410	2412
				30.000		2517	2664
				60 .000		2546	2576
				90,000		2538	2593
				120.000		2458	2464
				135,999		2466	2381
				150,999		2470	2395
				165,000		2423	2262
				180,000		2361	2334
			•	195.000		2383	2599
			+ +	210.000		2399	2617
				225.000		2415	2577
				240,000		.0000	2518
				270,000		2351	2474
೨ ೧				300.000		2317	2422
FI FI				339.000		2392	2451

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DATE DS MAY 75

## TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 )

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4.000

ARC11-D141A19 OTS+STRUT SRB-OFF MS-OFF SRB BASE

(REUKG1) ( D4 FEB 75 )

## REFERENCE DATA

## FARAMETRIC DATA

1,000

8.000 ELV-08 =

= אאא פפפ.

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0220	YMRF = .00	00 IN. XT 00 IN. YT 00 IN. ZT		ELV-18 = RUDDER = GIMBAL =
SECTION ( 1) SRB BASE	ם .	EFENDENT VAR	TABLE C	
ALFHA ( 1) = -3.993 BETA	(1) = .999	BASE TAP NO	1.000	
		621.000	3280	
		622.000	4272	
		623.000	3372	
And the second second		624 .000	3043	
ALPHA ( 2) =216 BETA	(1) = -4.006	BASE	1.999	ORIGINAL PAGE LO
		TAF NO		# E
		621.000	2781	ŏ₽
		622.999	3759	<i>₽≷</i>
		623.000	- 2936	e0 <u>A</u>
		624.000	2785	Ø (
		•		Z 'z
ALPHA ( 2) =336 BETA	(.2) = .006	BASE	1,000	
		CN FIAT		
		621.000	3963	
		622,000	3898	7 5
•		623.000	3125	
		624,000	2971	
ALPHA ( 2) =222 BETA	(3) = 4.025	BASE	1.000	
		TAP NO		
		621.000	3410	
		622 .000	3719	
		623.000	3358	
		624.000	3969	
		· ·		
ALPHA ( 3) = 3.948 BETA	(1) = .999	BASE	1.000	
		CH SAT		
		621.000	3191	
		622.000	3617	
		623.000	3911	
		624,000	3037	

4.999

# ARC11-0147A19 OTS+STRUT SEB-OFF MES-OFF SEB BASE

(REUKO2) ( D4 FEB 75 )

## REFERENCE DATA

## FARAMETRIC DATA

1,000

ELV-IB =

GIMBAL =

8.000 ELV-08 =

= HOAM CCC.

SREF = 2690.0000 S LREF = 1290.3000 S BREF = 1290.3000 S SCALE = .0000	IN.	YMRF	•	0000 IN. XT 0000 IN. YT 0000 IN. ZT	
SECTION ( 1) SRB BAS	Æ			DEPENDENT VAR	TABLE CP
ALPHA ( 1) = -4.176	BETA	(1) =	.000	BASE	1,000
				CM FAT	
				621.000	5959
				622,909	
				623 .000	5891
				624,000	5974
ALPHA ( 2) =294	BETA	(1) =	-4.003	BASE	1,900
				ON TAT	
				621.000	5382
				622.000	5636
				623.000	5421
			1	624.000	5441
ALPHA ( 2) =252	BETA	( 2) =	.009	BASE CN SAT	1.000
	•			621 .000	~.5693
				622.000	5875
				623.000	5748
				624.000	5852
ALPHA ( 2) =225	BETA	(3) =	4.028	BASE	1.000
				CM PAT	
				621.000	
				622.000	5891
				623,000	5669
				624.000	5839
ALPHA ( 3) = 4.026	BETA	(1) =	.000	BASE	1.000
42114 ( 3) = 41340			- TT 7	TAP NO	
				621.000	5734
				622.000	
				623,000	
			•		5922

## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-914 )

PAGE 1515

4,999

ARC11-D14TA19 OTS+STRUT SRB-OFF MPS-OFF SRB BASE

(REUKOS) ( 94 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

8.999

.000 000.1

BREF SCALE	•	.3000 1 .3000 1		YMRF ZMRF		דץ .אז פפפם. דב .אז פפפם.			RUDDER = GIMBAL =
SECT	(1) NCI	SRB BAS	ε			DEPENDENT VA	TABLE CP		
ALFHA	(1) =	-4.182	BETA	(1):	= .003	BASE	1.000		
			•			TAP NO			
						621.000	5150		
						622.000	5230		•
						623,000	5209		
						624.000	5332		
AL PHA	(2) =	291	BETA	(1)	= -3.997	BASE	1,999		· · · · · · · · · · · · · · · · · · ·
7,2,117	•					TAP NO			: ≥ o
		* 1		٠.		621.000	5106		
						622.000	5122		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
						623.000	5000		88
	•					624.000	5175		₹ <u>₹</u>
AL EUA	(2) =	- 177	PETÁ	(2)	= .916	BASE	1.999	•	ORIGINAL PAGE IS OF POOR QUALITY
001110	, -		SCIA			TAP NO			$\Delta \Delta$
						621,000	5321		F 50
						622,000	5298	•	
						623.000	5279		₹ 🙀
						624.990	5390		. 02
	. 0) -	766	DETA		= 4.031	BASE	1.000		
ALITHA	(2) =	500	DEIA	(.5)	= 4.051	TAP NO	1,333		
							5137		
		• •				621.000			
						622.000	5194		
						623.000	5242		
			. :			624.000	5335		
						0.05	4 000	•	
ALPHA	( 3) =	5.843	BETA	(1)	= ,993	BASE	1,999		
						CH TAT			
					•	621.000	5518	•	•
			-			622.000	5442		
•						623.000	5433		
						624.999	5552		

1,400

## ARCTI-DIATAL PICTOR TO THE PROPERTY OF THE PRO

(REUKD4) ( D4 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

000.8 000.

1.000

ELV-IB = RUDDER = GIMBAL =

LREF BREF	=	1290	.3000 CCCC.	IN.	YMRF	=	TX .NI 0000. TY .NI 0000. TX .NI 0000.	
SCALE	=		,0200					•
SECTI	NC	( 1)	S48 8/	l <b>S</b> E			DEPENDENT VA	RIABLE CF
ALPHA	(	1) =	-3.906	BETA	(1) =	.009	BASE	1.000
							CM FAT	
							- / -	4354
						*		4413
			7.7					4354
							624.000	-:4444
ALPHA	C	2) =	204	BETA	(1) =	-4,999	BASE	1.000
							TAP NO	
							621.000	4089
							622.000	
							623,000	3947
							624,000	4131
41 5114	٠.							
ALITHA		<u> </u>	596	DE IA	(2) =	1010	BASE	1,000
							CM 9AT	4.400
							622.000	
							623.000	
•							624.990	4439
		•					024.100	-,4455
ALPHA	( 2	) =	267	BETA	(3) =	4.031	BASE	1.000
							CN TAF NO	
							621.000	4405
			•				622.000	4443
							623,000	4445
							624.000	4543
ALPHA	( 3	) =	4.392	BETA	(1) =	.012	SASE	1.000
							CH TAT	
							621,000	
							622.000	
							623.000	
			•				624.000	4638

ORIGINAL PAGE IS
OF POOR QUALITY



# DATE 03 MAY 75 TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1517

ARC11-014TA19	TUPT2+2TC	SR9-V24	MES-NOW	SER	BASE

SR8 BASE (REUKOS) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DAYA

ELV-18 = 8.000 ELV-08 = RUDDER = .000 MACH = GIMBA' = 1.000

LREF = 1290,3000 IN. YMRF =	76.9990 IN. XT .0999 IN. YT TY. IN. 2009.09
SECTION ( 1) SRB BASE	DEFENDENT VARIABLE CF
ALPHA ( 1) = -4.11 BETA ( 1) = -,500	6 9ASE 1.000
	TAP NO
	621.0004206
	622.0005601
	623.0004234
	621.0004206 622.0005601 623.0004234 624.0004300  BASE 1.000 TAF NO 621.0003507 622.0004060 623.0003568 624.0003588  BASE 1.000
ALPHA (2) =306 BETA (1) = -4.000	BASE 1.000 PA
4:00	TAP NO
	621.9993597
	622 .0004060 A
	623.0003376
•	624.0003588
	RH
ALPHA ( 2) =264 BETA ( 2) = .016	BASE 1,000
	TAP NO
	621.0004124
	522.0005829
	623.0003995
	624.0004223
	17460
ALPHA (2) =348 BETA (3) = 4.028	DASE 1.000
	TAP NO
	621.9994763
	622,0006632
	523.0004909
	624.0004853
4	
ALPHA (3) = 3.924 BETA (1) = .000	BASE 1.000
	CN PAT
	621.0004025
	522.0005925
	623,0003966
	624,0004095

4.000

1.199

ARC11-0147A19 OTS+STRUT SRB-NOW MES-NOW SRB BASE

(REUKD6) ( D4 FEB 75 )

MACH =

## REFERENCE DATA

ALPHA ( 3) = 3.984 BETA ( 1) = .003

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. UREF = 1290.5000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRF = 976.0000 IN. XT YMRF = .0000 IN. YT ZMRF = 400.0000 IN. ZT	.4	ELV-IB = 8.999 RUDDER = .999 GIMBAL = 1.999
SECTION ( 1) SRB BASE	DEPENDENT	VARIABLE CF	
ALPHA ( 1) = -4.078 BETA	(1) = .000 BASE TAP N	.1,999	
	621.00 622.00	94743	
	623.00 624.00	04691	
ALFHA ( 2) =396 BETA	(1) = -4.903 BASE TAP N	1.000	
	621.50 622.50	94328	
	623.09 624.09		TOTAL BOOK HO
ALPHA ( 2) =498 BETA	(2) = .009 BASE	1.000	100 Miles
	TAP N 621.99	04741	$\mathcal{S}_{\mathcal{S}}$
	622.00 623.00 624.00	04505	F
ALFHA ( 2) =339 BETA	(3) = 4.028 BASE	1,500	
nation ( b) = -1000 Uain	TAP N 621.00	0	

622.000 -.5397 623.000 -.5047 624.000 -.5384

1.000

621.000 -.4569 622.000 -.4982 623.000 -.4445 624.000 -.4739

BASE

CA SAT 000.123





DATE DS MAY 75

# TABULATED SOURCE FRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1519

4.999

1.259

ARC11-014TA19 OTS+STRUT	SEB-NOW MES-NOW SEB BASE

(REUKO7) ( 04 FEB 75 )

MACH =

## REFERENCE DATA

## PARAMETRIC DATA

פפפ.

1,000

8.000 ELV-08 =

SREF	= 2690.0000 s	Q.FT. XMEP =	. 076 0000 to us			
LREF	= 1290.3000 T	N. YHRE =			•	ELV-IB =
BREF	= 1290.3000 1	N ZMRP =	TY .NI 0000.000			FUDDER =
SCALE	= .0200	2.40.	499,9999 TM: \$1			GIMBAL =
SECT	ion (1)598 Bási	E	DEPENDENT V	AR TABLE CF		
ALPHA	(1) = -4.131	BETA ( 1) =	.003 BASE	1,000		
		•	TAP NO			•
			621,000	3146		S S
			622,000	3238		
			623.000	2950		l <del>t</del> j
			624.000	3181		FOOD R
						()   <del>  </del>
ALPHA	(2) =399	BETA (1) = $-4$	.000 BASE	1.000		
			CM FIAT			<u> </u>
			621.000	2844		Į,
			622.900	3943		
			623.000	2645	•	F
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		624.000	3029		ZILTAUG
AI GHA	( 2) = 444	<b>**</b>				
A2011A	(2) =411	DETA (2) =	.012 BASE	1.999		
			CM FAT			
			621.000	3996		
			622.000			
			623.000	2916		
			624.900	3206		
AI FHA	(2) =438	BETA (3) = 4.				
	1430	DEIN (3) = 4.		1.000		
			TAP NO		•	
	•		621.000	3976		
			622.000	3928		
			623.000	3767		
			624.999	3971	-	-
ALFHA	(3) = 3,582	BETA ( 1) = .	003. BASE	4 000		
			DOS. BASE TAP NO	1.000	•	
			621.000	7765	•	
			622.000	3365		
			100.330	3605		

623.000 -.3052 624.000 -.3485

4.000

1.400

#### ARCI 1-D14TA19 OTS+STRUT SRB-NOW MES-NOW SRB BASE

(REUKO8) ( 04 FEB 75 )

ELV-OB =

## REFERENCE DATA

# · PARAMETRIC DATA

8,000

.000

1,000

ELV-IB =

RUDDER =

GIMBAL =

LREF	=	129 129	0.000.0 0.005.0 0005.0 0000.	IN.	XMRI YMRI ZMRI	= =		פפפפ.	IN. XT IN. YT IN. ZT		• •		EL: GI:
SECT	ION	( 1	SRB BA	SE				DEPE	ENDENT VA	RIABLE CP			
ALPHA	(1	) =	-4.017	BETA	(1)	=	.006		BASE	1.000			
									CH PAT				
							•		621.000	1529			2
									622.000	1958			7 2
									623.000	1644			7 5
									624.999	1728			0 Z
ALPHA	( 2	:) =	485	BETA	(1)	= -	4.999	•	BASE	1.000			ORIGINAL PAGE IS OF POOR QUALITY
									TAP NO				2 -
									621.000	1591			7
									622.999	1671			FO
									623,000	1348			
									624.000	1544			7 5
ALPHA	( 2	) =	438	BETA	( 2)	= .	.016		BASE	1.999			
									CM FIAT			_	
			1						621.000	1781			
									622.000				
									623.000	1655	• •••		•
									624.000	1849			
ALPHA	(2	) =	456	BETA	( 3)	= 4	.028		BASE	1.000			•
									TAP NO				
								(	621.999	2361			
									522.000	2418			
									623.000	2175			
									624.000	2417			
ALPHA	( 3)	= .	4.014	BETA	(1)	=	.009		BASE	1.000			
									CH PAT				
								€	921.000	1968			
								. (	522.000	2158			
									523.000	1705			
								. 6	24.000	2061			

DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1521

ARCII-DIAIAIO OTS+STRUT SRB-LOW MFS-NOW SRB BASE (REUKOO) ( D4 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

.000 1.000

8.999 ELV-08 =

MACH

SREF = 2690.0000 SQ.FT.       XMRP = 976         LREF = 1290.3000 IN.       YMRP =         BREF = 1290.3000 IN.       ZMRP = 400         SCALE = .0200       .0200	.0000 IN. VT	
SECTION ( 1) SAB BASE	DEPENDENT VARIABLE	CF
ALFHA ( 1) = -4.191 BETA ( 1) = .000	BASE 1.000	1
	TAF NO	
	621.000310	2
	622.999494	
	623.999314	7
	624.000323	7
ALFHA ( 2) =438 BETA ( 1) = -4.000	BASE 1.000	
	TAP NO	
	621.000252	9
	622.000289	3
	623.000244	2
	624.000259	2
ALEHA (2) =525 BETA (2) =003	SASE 1.000	
	TAP NO	
	621.0002574	ı
	622.0003714	4
	623.0002594	\$
	524.000269	<b>?</b>
ALPHA (2) =441 BETA (3) = 4.025	BASE 1.000	
	CK PAT	
	621.0002991	
	522.0003949	
	623.0003036	
	524.0003164	
LFHA ( 3) = 4.050 BETA ( 1) = .006	BASE 1.000	
	TAP NO	
	621.0002507	
	622,900 -,3732	
	623.0002448	
	624,000 -,2475	

ORIGINAL PACE IS

ELV-18 = RUDDER = GIMBAL =

4.999

1.199

ARC11-D14TA19 DTS+STRUT SRB-LOW MPS-NOW SRB BASE (REUK1D) ( D4 FEB 75 )

## REFERENCE DATA

# FARAMETRIC DATA

1.000

ELV-IB =

RUDDER =

GIMBAL =

8.900 ELV-08 =

.000 MACH =

SREF = 2699.0000 \$Q.FT. XMRF = LREF = 1290.3000 tN. YMRF = BREF = 1290.3000 tN. ZMRF =	7777 Th
SCALE = 3.A22	**************************************
SECTION ( 1) SRB BASE	DEPENDENT VARIABLE CP
ALPHA ( 1) = -3.978 BETA ( 1) = -	.006 BASE 1.000
	TAP NO
	621.0005277
	622,000 -,5568
	623.0005158
	524.0005429
ALPHA ( 2) =387 BETA ( 1) = -4.	.003 BASE 1.000
	CN FAT
	621.0004913
	622.0005535
	623.0004811
	524.9995949
ALPHA ( 2) =429 BETA ( 2) = .	000
THE SELVING	9ASE 1.000
	CA PAT
	621.0005361
	622.0005636 623.0005134
	524.0005453
MEPHA ( 2) =384 SETA ( 3) = 4.0	028 9ASS 1.000
	CV SAT
	621.0005846
	622.0005957
	623.0005694
	524.0005932
LPHA ( 3) = 3.930 BETA ( 1) = .0	100 545° 1 non
	2,104 2,000
english and the second second	CV TAT
	621.0005635
	622.0005978 523.0005373
	624,0005696

DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1523

ARC11-014TA19 OTS+STRUT SRB-LOW MES-NOM SRB BASE

(REUK11) ( D4 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

8.000

בכם.

1.000

ELV-18 =

RUDDER =

GINBAL =

LREF =	2690.0000 \$6 1290.3000 11 1290.3000 11 0000.	Ņ.	YMEP	= .00 = 490.0	900 IN, XT 900 IN, YT 900 IN, ZT	
SECTION	( 1) SRB BAS	Ε.		1	DEFENDENT VAR	TABLE CP
ALPHA (	1) = -4.746	BETA	(1) =	.006	BASE TAP NO	1,000
				- 1	621.000	3906
					622,000	
					623 .000	
					624.000	3917
ALPHA (	2) =444	RETA	(.i) =	-4 .000	BASE	1,000
		-	, -	7.200	TAP NO	• • • • • • • • • • • • • • • • • • • •
					621.000	3623
					622 .000	3727
					623.000	3500
					624.000	3951
ALPHA ( 2	2) =492	BETA	( 2) =	.912	BASE TAP NO	1.000
					621.000	3010
					621.000 622.000	
				•		3671
					624.000	3948
ALPHA (	2) = -,324	BETA	( 3) =	4.034	BASE	1.000.
					CM SAT	
					621.999	4375
					622,000	4377
	•				623.000	4314
				•	624.000	4487
ALPHA (	3) = 3.552	BETA	(1)=	.003	BASE	1.000
				*	TAF NO	
					621.000	4116
	• • •				622.000	4251
					623.000	3792
					624.999	4195

4.999

1.400

ARC11-014TA19 OTS+STRUT SRB-LOW MES-NOW SRB BASE

(REUK12) ( D4 FEB 75 )

MACH =

## REFERENCE DATA

## PARAMETRIC DATA

8.000

1.000

.000

ELV-IB =

RUDDER =

GIMBAL =

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE =0200	XMRP YMRP ZMRP	= 976.000 = .000 = 400.000	D IN. XT D IN. YT D IN. ZT	
SECTION ( 1) SRB BASE		DE	PENDENT VA	RIABLE CP
ALPHA ( 1) = -4.122 BETA	(1)=	.000	BASE TAP NO	1.999
			621.000	2370
			622.999	2716
			623.000	
			624.000	2553
ALPHA ( 2) =396 BETA	( t) =	-4.993	BASE TAP NO	1,999
			621.000	2057
			622.000	2372
			623.000	1966
			624.000	2156
ALPHA ( 2) =378 BETA	( 5) =	.006	BASE TAP NO	1.999
			621.000	2624
			622.000	2732
			623.000	
			624.000	2675
ALPHA ( 2) =315 BETA	( 3) =	4.925	BASE TAP NO	1.000
			621.000	3126
			622.000	3107
			623.000	2993
•			624.000	3201
ALPHA ( 3) = 4.005 BETA	(1)=	מפס,	BASE TAP NO	1.000
			621.000	2788
	•		622.000	
			623.999	2489 -
			624.000	2949



DATE 93 MAY 75

## TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1525

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-OFF SRB BASE (REUK13) ( 04 FEB 75 )

## REFERENCE DATA

## FARAMETRIC DATA

,ספס, 1.000

ELV-IB = RUDDER =

GIMBAL =

8.000 ELV-08 =

		XMRF = 976.000			
LREF = 1290	או פפפנ.	900. = 97MY	זץ או פנ		
		ZMRF = 400.000	וא. צו		
SCALE =	.0200				
SECTION ( 1)	SRB BASE	DE	EPENDENT VAR	TABLE CP	
ALBUA : 55 -	_4 119 RETA	(1) =993	BASE	1.000	
ACTION 1 17 -		( 1/ 0 - 1020	TAP NO	•••	
			621,000	4288	
			622,000		
			623.000	4347	
			624.000	4498	
ALPHA ( 2) =	390 BETA	(1) = -3.997	BASE	1,999	
			CM PAT		
			621.000		
	•		622.000	4711	
			623.000		
			624.000	3739	
ALPHA ( 2) =	378 BETA	(2) = .016	BASE	1.000	
			TAP NO		
			621.000		
			622.000		
			623.000		
			624.000	-,4028	
ALPHA ( 2) =	327 BETA	(3) = 4.928	BASE	1.000	
			CM PAT		
			621.999		
			622.000		
			623.999		
	e e e		624.000	4799	
ALPHA ( 3) =	3.909 BETA	(1) = .000	BASE	1,000	
		9	CN PAT		
			621.000	4979	
			622.000	6077	
			623.000	4959	
		•	624.000	4141	
	er professional and the second				

ARC11-014TA19 OTS+STRUT SRB-NOW MES-OFF SRB BASE (REUK14) ( 04 FEB 75 )

8,999 ELV-08 = 4,999

.000 WACH = 1.100

## REFERENCE DATA

## FARAMETRIC DATA

ELV-IB =

GIMBAL = 1.000

RUDDER =

	IN. XT IN. YT IN. ZT	
SECTION ( 1) SRB BASE DEP	ENDENT VA	RIABLE CP
ALPHA (1) = -5.142 BETA (1) =006	BASE	1,999
	CW PAT	
	621.000	4347
	622.000	4966
	623.000	4499
	624.000	4595
ALPHA ( 2) =32 BETA ( 1) = -4.993	BASE	1.909
	TAP NO	
	621.000	4181
	622.000	4925
	623.000	4008
	624.000	4291
ALFHA ( 2) =432 BETA ( 2) = .016	BASE	1.000
	TAP NO	
	621.000	4565
	622.000	4953
	623,000	-,4391
	624.000	4698
NLFHA ( 2) =396 BETA ( 3) = 4.025	BASE	1.000
	TAP NO	
	521,000	5092
•	522.000	5334
	523 . 000	4996
	624.000	5276
LPHA ( 3) = 3.864 BETA ( 1) = .003	BASE	1,000
	TAP NO	
		4576
		- 5027
		-,4459
		4759

DATE DE HAY TE TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-D14 )

PAGE 1527

4,999

1.250

BEAR BRS FTC-STM NUMBER TUFFERTO PLATE 1119A

(REUK15) ( 04 FEB 75 )

MACH =

## REFERENCE DATA

# PARAMETRIC DATA

8,000

פפפ.

-1,999

			16-11		••							
LREF	=	1290	.0000 50	A	YM7=	Ŧ	0200.976 0000. 0000.000	IN. YT				ELV-IB = RUDCER = GINBAL =
BREF SCALE			.3000 Ti .0200	N.	ZMRF	•	400,0000	2111 2.				
								FURTHER USE	TABLE	•		
SECT	TON	(1)	SRB BAS	Ę			- טט-	ENDENT VAR	STADIL CI			
ALPHÄ	. (	1) =	-4.119	BETA	(1) =	0	93	BASE	1.000			
	•							CH PAT				
								621.000	~.3031			
								622.000	3115			
								623.000	~.2854	•		
								624.000	3068		~ ~	
•											으유	
		<b>~</b> -	393	DETA	(4)	a c	חת	BASE	1,000			
ALPHA		2) =	~.593	DE (A	( 1)		144	TAP NO			<b>₽</b> 9	
								621,000	2727		97	
								622.000	2926		$\mathcal{L}$	
								623.000	2534		~ [-	
								624,000	-,2956		<b>D</b> 1-1	
								024 (15)	-,2333			
								5.05	1,000		ORIGINAL PAGE IS OF POOR QUALITY	
ALPH	A , Ç	2) =	363	SETA	(2)	= .[	112	BASE	1			
								CH PAT	***			
								621,000	3025		±4 bh	
								522.000	-,3290			
								623.000	2866			
								624.000	~.3133			
		<b>6</b> 1 -	294	BETA	(13)	= 4.F	728	- BASE	1.000			
ALCR	^ \	E1 -	- 16 37				-,	TAP NO			-	
								621.000	3696			
								622.000	3761			
								623.000	3623			
								624.000	3796	•		
								02-01		* •		
A : 10 · ·	. ,	41 -	3.834	GETA	( 1)	<b>=</b> 1	012	BASE	1.000			
ALIM	A (	3) 3	3.034	3217	,	- ••		TAP YO				
								-	3314			
								622,000	3569			
								523.000				
								624.000	-,3460			
								024.000	-,,,,,,,,			

1,400

ARC11-0141A19 OTS+STRUT SRB-NOM MRS-OFF SRB BASE

(REUK16) ( D4 FEB 75 )

= 8C-V13

MACH =

## REFERENCE DATA

## FARAMETRIC DATA

0.000

מפת,

1.000

ELV-IB =

RUDDER = GTHBAL =

SREF = 2690.0000 SQ.FT. XMRF = 97 LREF = 1290.3000 IN. YMRF = BREF = 1290.3000 IN. ZMRP = 40 SCALE = .0200	76.0000 IV. XT TY ,NI 0000. 14. ZT
SECTION ( 1) SEB BASE	DEPENDENT VARIABLE CP
ALPHA ( 1) = -4.095 BETA ( 1) = .012	9ASE 1.000
	TAP NO
	621.0001552
	622.0001987
	623.0001738
	624.0001818
ALPINA CRIM MARKET	
ALPHA ( 2) = +.39\$ BETA ( 1) = -4.000	BASE 1.000
	TAF NO
	621.0001305
	622.0001532
	623.0001221
•	624.0001323
ALPHA (2) =291 BETA (2) =003	
(2) =003	BASE 1.000
	CA PAT
	621.9991818
and the second s	622.0002001
	623.0001663
	624.9931874
ALPHA (2) =318 BETA (3) = 4.025	610F 4 DDC
4,023	BASE 1.000
	CA PAT
	621.0002373 622.0002415
	623.0002244
	624.9002409
	224.200E809
LPHA ( 3) = 3.861 BETA ( 1) =006	DASE 1,000
	TAP NO
	621.0001921
	622.0002079
	623.0001676
	624.0002010

ORIGINAL PAGE ELOPE POOR QUALITY





DATE 03 44Y 75

# TABULATED SOURCE FRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1529

4.000

.900

ARC11-014IA19 OTS+STRUT SRB-HI M'S-HI SRB BASE

(REUK17) ( 04 FEB 75 )

		e		-	
REF	C.R	ĽΝ	CE	137	ŁΤΛ

## PARAMETRIC DATA

1.000

8.000 ELV-08 =

.DDD MACH =

LREF = 1290.3000 IN. YHRE =	0903 IN. XT 0903 IN. YT 0903 IN. ZT		ELV-IB = RUDDER = GIMBAL =
SECTION ( 1) SRB BASE	DEPENDENT V	ARIABLE CP	
ALFHA (1) = -4.155 BETA (1) = .009	BASE	1.000	
	TAP NO		
	621,000		9,9
	622,555		~ 건
	623.000		<b>୮୯</b> ଦି
			多点
•	624.000	2795	2
ALPHA (2) =42 BETA (1) = -4.003	D		
14.003 THE COURT OF THE COURT O	BASE	1,000	Ø 🛴
	TAF NO		
	621,999	~.2529	A.A
•	622.009	2752	
	623.000	2490	
	624.999	2555	ORIGINAL PAGE IS
ALPHA (2) =447 BETA (2) = .009			•
ALPHA (2) =447 BETA (2) = .009	BASE	1,999	
	TAP NO		
	621.999	2462	
	622.500	3393	
	623.000	2560	
	624.000	2602	
41 544 ( 9) - 455 pris ( a.			
ALFHA ( 2) =435 BETA ( 3) = 4.028	BASE	1.000	
	CM PAT		
	621.000	2679	
	622.000	3395	
	623.000	2648	
	624.000	2758	
ALPHA (3) = 3.930 BETA (1) = .000	BASE	1.000	•
	CH PAT		
	621.000	2667	
	622.000	3752	
	623.000	2677	
	624.000	2667	

ur.

4.000

1.100

ARC11-D14TA19 OTS+STRUT SRB-HI MES-HI SRB BASE

(REUK18) ( 84 FEB 75 )

MACH =

## REFERENCE DATA

## FARAMETRIC DATA

פפפ.

1.000

QUDDER =

GIMBAL =

8.000 ELV-08 =

SREF = 2690	.DDDD SQ.FT.	XMRF = 976.		
LREF = 1290	.3000 IN.	YMRF =	דץ אוו פפפו	
BREF = 1290	.3000 IN.	ZMRP = 400.1	ooo in. zi	
SCALE =	.0200			
SECTION ( 1)	SRB BASE		DEPENDENT VAR	TABLE CP
ALPHA ( 1) =	-4.598 BETA	(1) = .999	BASE	1.000
			CM FAT	
			621.000	3263
	•		622.000	
			623.000	
			624.000	3494
ALPHA ( 2) =	396 BETA	(1) = -4.903	BASE	1.000
			CH TAT	
			621.000	3996
			622.999	
			623.000	2917
			624.909	3149
			•	
ALPHA ( 2) =	435 BETA	(2) = .009	BASE	1.000
			CM TAT	777.
			621.000	
			622.999	
			623.999	
			624.000	3521
ALPHA ( 2) =	575 BETA	(3) = 4.028	BASE	1.000
			CH PAT	
			621.999	
			622.000	4945
•			623.000	3544
			624.000	3952
ALPHA ( 3) =	3.915 BETA	(1) = (1)	BASE	1.000
•			CH SAT	
			621.000	3335
			622.000	-,4050
			623.000	3413
			624.000	3599



DATE 05 HAY 75

TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

PAGE 1 531

## ARCI 1-014TATO OTS+STRUT SRB-HT MES-HT SRB BASE

(REUK19) ( D4 FEB 75 )

	REFERE	NCE DA	TA						1	ARAMETRI	DATA	
LREF =	2690.0000 9 1290.3000 1	N.	XMRF YMRF	=	.0000 IN. XT .0000 IN. YT				ELV-18 = RUDDER =	8.000 000.	ELV-OB =	4.000 1.250
SCALE =	1290.3000 1 0020.	.N.	ZMRF	= 409	דג .או פפפפ.				GIMBAL =	1,999		
SECTION	( 1)55B BAS	Ε			DEFENDENT VA	TABLE OF						
	•					•						
ALPHA (	1) = -4.185	BETA	(1) =	- ,009	BASE TAP NO	1.000				•	•	
					621.000	1897						
					622,000	~.2052						
		•			623 .000	1697						
• .					624.000	1934						
ALPHA (	2) =459	BETA	(1) =	-4,000	BASE	1.000						
					CA FAT	_						
					621.999	1711						
					622.000	1884						
					623.000	1515						
	•				624.999	1898						
ALPHA ( 1	2) =438	BETA	(2) =	.912	BASE	1.000	•				•	
					TAP NO							
					621.000	1933						
					622.999	2394						
•		•			623.000	1895						
					624.990	2945						
ALPHA (.2	2) =549	BETA	(3) =	4.028	BASE CM PAT	1,000						
					621.000	2517						
					622,000	2714						
• *					523.000	2433						
					624.999	2645		*				
ALPHA ( 3	3) = 3.510	BETA	(1) =	.012	BASE	1,000						
			•	•	TAP NO							
					621.000	2129						
					622.000	2551		•				
					623,000	1976						
					624.000	2305						
	•											

4.999 1.499

ARC11-D14TA19 OTS/STRUT SRB-HT MFS-HT SRB BASE

(REUK20) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF       =       2690.0000 SQ.FT.         LREF       =       1290.3000 IN.         BREF       =       1290.3000 IN.         SCALE       =       .0200	XNRF = 976.0000 IN. XT YMRF = .0000 IN. YT ZMRF = 400.0000 IN. ZT		ELV-IB = RUDDER = GIMBAL =	8.000 .000 1.000	ELV-DB = HACH =
SECTION ( 1) SEB BASE	DEFENDENT VAR	TABLE CP			~
ALFHA ( 1) = -4.167 BETA	(1) = .003 BASE	. 500			
ACOUNT ( 17 = -4:107 DEIA	CO PAT	1.000			
	621.000	0599	•		
	622.000	1002			
	623.000	-,0723			
	624.000	0791			
	55.4.333				
ALPHA ( 2) =489 BETA	(1) = -4.003 BASE	1,999			
	TAP NO				
•	621,000	0439			
	622.000	0579			
	623.000	0332	•		
•	624.000	-,0456			
ALFHA ( 2) =432 BETA		1,000			•
	TAP NO	4700			
	621.000	0720			•
	622,000	0991			
	623,000	0607			
	624.000	0772			
ALPHA ( 2) =486 BETA	(3) = 4.025 BASE	1.000			
1100 0211	TAP NO	A garatu			
	621,000	1317			
	622.000	1458			
	623.090	1164			
	624.000	1342			
		1 2 3 7 12			
ALPHA ( 3) = 3.65* BETA	(1) = .009 BASE	1,000			
	CN FAT				
	621,000	0837			
	622,999	1145			
	623,000	0621			
	624,500	0905	•		





DATE 03 MAY 75 TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

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1.499

ARC11-0141A19 OTS+STRUT SR9-OFF MTS-OFF SRB BASE (REUK21) ( 04 FEB 78 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

## PARAMETRIC DATA

1,000

= 8C-V\_3 000.8 .000 MACH =

ELV-IB =

LREF BREF SCALE	= 129	0.3000 0008.0 0020	IN. IN.			0000 IN. YT		
SECT	10N ( 1	AE EPZ	Œ			DEPENDENT VA	RIABLE CP	
ALPHA	( 1) =	-4.299	BETA	(1) =	.003	BASE	1.000	
				•		CH SAT		
						521.000		
		•				622.000	-,4357	
					•	623.000		
					•	624.999	4311	
ALPHA	(2) =	189	BETA	(1) =	-4.000	BASE	1.000	
						TAP NO		
						621.999		
						622.000	4272	
						623.000	3929	
					• •	624.000	4090	
ALPHA	(2)=	291	BETA	(2) =	.912	BASE	1.999	
	•					621.000	4383	
						622.000		
						623.000		
						624.000	4367	
ALPHA	(2) =	306	BETA	(3) =	4.028	BASE TAF NO	1.000	
						621.999		
						622.000	4439	
						623.000	-,4428	
		•				524.000	4539	
NLPHA I	( 3) =	3.969	BETA	( 2) =	.005	BASE TAP NO	1.000	
						621.000	- 4507	
		11 -				622.000		
						623.000		
						624,000		
						064,555	- 14015	

FACE 1534

1.400

ARCII-DIATAIS DISHSTRUT SEB-NOM MES-NOM SEB BASE (REUKSE) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

# PARAMETRIC DATA

9.000

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1.000

SLV-IB =

RUDDER =

GIMBAL =

LREF.	= =	299	.3000	IN. IN.	YMR	=	.00	90 IN. XT 99 IN. YT 99 IN. ZT	· · · · · · · · · · · · · · · · · · ·		•
SECTI	ION	( 1)	SEB BA	ISE			'פ	EPENDENT VAR	TABLE CP		
ALFHA	( 1	) =	-4.167	BETA	( 1)	= .0	96	BASE	1.000	•	
			• :					TAP NO			
								621.000	1445		
								622,000			
						. •		623 .000	_		
				٠,				624.000	1667		
ALPHA	( 2	) =	346	BETA	(1)	= -3.9	197	BASE	1.000		
								TAP NO			
								621.000	1435		34
								622.000	1609		<b>P</b>
								623.000	1269		8
								624.000	1480		SE
ALPHA	( 2	) =	~.366	9ETA	( 2)	= .0	12	BASE	1.000		NAL PAGE IS
								TAP NO			A
					•			621.999	1681		FR
								622.000	1999		
								623.000	1546		H
								624.990	1746		-1.07
ALPHA	( 2	) =	522	BETA	(3)	= 4.0	31	BASE	1.000		
								CH SAT			
								621.000	2222		
								622.000	2299		
						_		623 .000	2052		
								624.000	-,2274		
ALPHA	( 3	) =	3.942	SETA	(1)	= .0	12	BASE	1.000		
- 1 ° .				**.				TAP NO			•
								621.000	1922		
								622.000			
								623.000			
				•				624.000	2009		



DATE 93 MAY 75

TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

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.999

ACC11-D141A19 OTS+STRUT SEB-OFF MS-OFF SEB BASE

(REUX23) ( D4 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

LREF	=	1292	.0000 .3000 .3000 .0000	ÌN.	YMR	P = P =		.0000 IN. XT .0000 IN. YT .0000 IN. ZT				ELV-IB RUDDER GIMBAL	= '	.000 .000 .000	ELV-08 NACH	;
ofer:		,	6 P. D.	n=				PERFECTE				•				
SECT	LUF	(1)	SRB BA	<b>⊃</b> E.				DEPENDENT VA	EINDIE CH					4		
ALFHA	(	1) =	-4.947	BETA	(1)	=	.ססס	BASE	1.000							
								CM PAT								
								621.000	3336							
								622.000	4283							
								623.000	3413	•						
				•				624.000	3075							
ALPHA	(	2) =	276	BETA	(1)	= -4	.993	BASE	1.990							
								TAP NO								
								621.999	2985							
							4.	622.000	3866							
								623,000	3182	•						
								624.999	2935							
ALPHA	<b>(</b> )	2) =	237	BETA	( 5)	=	.009	BASE TAP NO	1,000							
			•					621.000	2813							
								622,000	3695							
								623.000	2811							
								624.000	2612	•						
ALPHA	( )	2) =	195	BETA	( 3)	= 4	.028	BASE	1.999							
								TAP NO								
			•					621.000	3247							
			. •					622,000	3597		•					
								623.000	3257				•			
								624.000	2956							
								02.415.53	2335				•			
ALPHA	( :	3) =	3.855	BETA	(1)	=	.003	BASE TAP NO	1,900							
								621.000	3132							
			•					622.000	~.3787	•						
								623.000	3934							
					•			624,000	3054		÷					

ARC11-014TA19 DTS+STRUT SRB-OFF MRS-OFF SRB BASE (REUK24) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

1.000

= 80-V13 000.

= HACH @@@.

ELV-IB =

RUDDER =

GIMBAL =

SCALE = .0200  SECTION ( 1) SRB BASE DEFENDENT VARIABLE CF  ALPHA ( 1) = -3.993 BETA ( 1) = .009  TAP NO 621.0005871 622.0005961 623.0005970 624.0005920  ALPHA ( 2) =279 BETA ( 1) = -4.003  BASE 1.000 TAP NO 621.0005551 622.00055610 623.00055610 623.00056140 624.0005440  ALPHA ( 2) =246 BETA ( 2) = .009  ALPHA ( 2) =246 BETA ( 3) = 4.025  ALPHA ( 2) =273 BETA ( 3) = 4.025  ALPHA ( 3) = 3.804 BETA ( 1) =003  BASE 1.000 TAP NO 621.0005614 622.0005519 623.0005554 622.0005556 624.0005556 624.0005766  ALPHA ( 3) = 3.804 BETA ( 1) =003  BASE 1.000 TAP NO 621.0005554 622.0005766  ALPHA ( 3) = 3.804 BETA ( 1) =003  BASE 1.000 TAP NO 621.0005556 624.0005766	LREF	=	129 129	0.0000.0 1.0005.0 1.0005.0 0020.	n.	YMRF	Ξ		בים בים.	IN.	ΥT			
ALPHA (1) = -3.993 BETA (1) = .009  TAF NO 621.0005871 622.0005767 624.0005920  ALPHA (2) =279 BETA (1) = -4.003  BASE 1.000 TAF NO 621.0005920  ALPHA (2) =246 BETA (2) = .009  ALPHA (2) =246 BETA (2) = .009  ALPHA (2) =246 BETA (2) = .009  ALPHA (2) =273 BETA (3) = 4.025  ALPHA (2) =273 BETA (3) = 4.025  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAF NO 621.0005614 622.0005919  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAF NO 621.0005554 622.0005766  BASE 1.000 TAF NO 621.0005566 624.0005766	SCHEE	-		,0200										
TAF NO 621.0005871 622.0005981 623.0005767 624.0005920  ALPHA (2) =279 BETA (1) = -4.003  BASE 1.000 TAF NO 621.0005351 622.0005610 623.0005418 624.0005418 624.0005440  ALPHA (2) =246 BETA (2) = .009  ALPHA (2) =246 BETA (3) = 4.025  BASE 1.000 TAF NO 621.0005614 622.0005816 623.0005918  ALPHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAF NO 621.0005554 622.0005566 624.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAF NO 621.0005566 624.0005766	SECT	I ON	( 1	STB BAS	Œ.				DEFE	ENDEN	r vaq	IABLE CP		
621.0005871 622.0005981 623.0005767 624.0005920  ALPHA (2) =279 BETA (1) = -4.003  BASE 1.000 TAP NO 621.0005510 622.0005440  ALPHA (2) = -,246 BETA (2) = .009  ALPHA (2) = -,246 BETA (2) = .009  ALPHA (2) = -,246 BETA (3) = 4.025  BASE 1.000 TAP NO 621.0005614 622.0005614 622.0005816 623.0005697 624.0005598  ALPHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAP NO 621.0005554 622.0005719 623.0005566 624.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAP NO 621.0005556 624.0005766	ALPHA	į.	1) =	-3.993	BETA	(1) =	:	.009		BAS	E	1.000		
622.0005981 623.0005767 624.0005920  ALPHA (2) =279 BETA (1) = -4.003  BASE 1.000 TAF NO 621.0005351 622.0005610 623.0005418 624.0005440  ALPHA (2) = -,246 BETA (2) = .009  TAF NO 621.0005614 622.0005614 622.0005614 622.0005615 623.0005617 624.0005614 622.0005918  ALPHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005554 622.0005719 623.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAF NO 621.0005556 624.0005766										TAP	CN			
623.0005767 624.0005920  ALPHA (2) =279 BETA (1) = -4.003  BASE 1.000 TAP NO 621.0005351 622.0005610 623.0005418 624.0005440  ALPHA (2) =246 BETA (2) = .009  ALPHA (2) =246 BETA (2) = .009  TAP NO 621.0005614 622.0005614 622.0005816 623.0005816 623.0005819  ALPHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAP NO 621.0005554 622.0005566 624.0005769 624.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAP NO 621.0005566 624.0005766										621.	999	5871		
ALPHA (2) =279 BETA (1) = -4.903  ALPHA (2) =279 BETA (1) = -4.903  BASE 1.909  TAF NO 621.9095351 622.9095418 624.9095449  ALPHA (2) =246 BETA (2) = .909  BASE 1.909  TAF NO 621.9095614 622.9095614 622.9095816 623.9005818  ALPHA (2) =273 BETA (3) = 4.925  BASE 1.900  TAP NO 621.9095554 622.9095719 623.9005556 624.9005766  ALPHA (3) = 3.804 BETA (1) =903  BASE 1.900  TAP NO 621.9095766					•					622.	פפפ	5981		
ALPHA (2) =279 BETA (1) = -4.003  BASE 1.000 TAF NO 621.0005351 622.0005610 623.0005418 624.0005440  ALPHA (2) =246 BETA (2) = .009  BASE 1.000 TAF NO 621.0005614 622.0005816 623.0005697 624.0005919  ALPHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAF NO 621.0005554 622.0005554 622.0005556 624.0005719 623.0005586 624.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAF NO 621.0005556 622.0005766										623.	ככם	5767		
TAF NO 621.0005351 622.0005610 623.0005418 624.0005440  ALFHA (2) =246 BETA (2) = .009 BASE 1.000 TAF NO 621.0005614 622.0005614 622.0005816 623.0005697 624.0005818  ALFHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005586 624.0005766  ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005566 624.0005766										624.	ממפ	5920		
TAF NO 621.0005351 622.0005610 623.0005418 624.0005440  ALFHA (2) =246 BETA (2) = .009 BASE 1.000 TAF NO 621.0005614 622.0005614 622.0005816 623.0005697 624.0005818  ALFHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005586 624.0005766  ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005566 624.0005766	AI PHA	ť	2) =	279	BETA	(1)	= -4	.003		BAS	E	1.999		
621.0005351 622.0005610 623.0005418 624.0005440  ALFHA (2) =246 BETA (2) = .009  ALFHA (2) =246 BETA (2) = .009  TAF NO 621.0005614 622.0005616 623.0005697 624.0005816 623.0005697 624.0005318  ALFHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005566 624.0005766  ALFHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAF NO 621.0005566 624.0005766		•						,					•	
622.0005610 623.0005418 624.0005440 ALFHA (2) =246 BETA (2) = .009 BASE 1.000 TAF NO 621.0005614 622.0005616 623.0005697 624.0005818 ALFHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005766 ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005566 624.0005766												5351		
623.0005418 624.0005440  ALFHA (2) =246 BETA (2) = .009  TAF NO 621.0005614 622.0005816 623.0005697 624.0005819  ALFHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005586 624.0005766  ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005566 624.0005766														
ALFHA (2) =246 BETA (2) = .009  TAF NO 621.0005614 622.0005816 623.0005697 624.0005818  ALFHA (2) =273 BETA (3) = 4.025  BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005586 624.0005766  ALFHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAF NO 621.0005766				•						623.	פפפ	5418		
TAF NO 621.0995614 622.0905816 623.0905697 624.0905918  ALFHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAF NO 621.0005554 622.0905719 623.0005586 624.0005766  ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005766										624.	פכפ	5440	•	
TAF NO 621.0995614 622.0905816 623.0905697 624.0905918  ALFHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAF NO 621.0005554 622.0905719 623.0005586 624.0005766  ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005766			-											
621.0005614 622.0005816 623.0005697 624.0005918 ALPHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAP NO 621.0005554 622.0005719 623.0005586 624.0005766 ALPHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAP NO 621.0005652 622.0005763 623.0005763 623.0005598	ALFHA	(	2) =	246	BETA	(2)	=	.009		BAS	E.	1.000		
622.0005816 623.0005697 624.0005918 ALFHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAF NO 621.0005554 622.0005719 623.0005586 624.0005766 ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005652 622.0005763 623.0005763 623.0005598										TAP	NO.			
623.0005697 624.0005918 ALPHA (2) =273 BETA (3) = 4.025 BASE 1.000 TAP NO 621.0005554 622.0005719 623.0005766 ALPHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAP NO 621.0005652 622.0005763 623.0005763 623.0005763										621.	- כפפ	5614		
ALPHA (2) =273 BETA (3) = 4.925  BASE 1.900 TAP NO 621.9095554 622.9095719 623.9005586 624.9095766  ALPHA (3) = 3.804 BETA (1) =903  BASE 1.900 TAP NO 621.9095562 622.9095763 623.9005763										622.	סטט	5816		
ALPHA (2) =273 BETA (3) = 4.025  TAP NO 621.0005554 622.0005719 623.0005586 624.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAP NO 621.0005562 622.0005763 623.0005763										623.	מממ	5697		
TAP NO 621.0005554 622.0005719 623.0005586 624.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAP NO 621.0005652 622.0005763 623.0005593										624.	000	5918		
TAP NO 621.0005554 622.0005719 623.0005586 624.0005766  ALPHA (3) = 3.804 BETA (1) =003  BASE 1.000 TAP NO 621.0005652 622.0005763 623.0005593			-											
621.0005554 622.0005719 623.0005586 624.0005766 ALPHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAP NO 621.0005652 622.0005763 623.0005599	ALFHA	(	2) =	273	BETA	(3) =	= 4	.025		BAS	E	1.000		
622.0005719 623.0005586 624.0005766 ALPHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005652 622.0005763 623.0005599										TAP	ND .			
623.0005586 624.0005766 ALPHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAP NO 621.0005652 622.0005763 623.0005599										621.	ממפ	5554		
624.0005766  ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005652 622.0005763 623.0005599				4						622.	י פפפ	5719		
ALFHA (3) = 3.804 BETA (1) =003 BASE 1.000 TAF NO 621.0005652 622.0005763 623.0005598	•				•					623.	מפפ	5586		
TAF NO 621.0005652 622.0005763 623.0005598		. •								524.	מפפ	5766		
TAF NO 621.0005652 622.0005763 623.0005598	ALPHA	ι	3) =	3.894	BETA	(1):	-	.003		BAS	E	1,999		
621.0005652 622.0005763 623.0005599		. '	-• -			, .,								
622.0005763 623.0005599												5552		
623.0005598														
	• * *										-			



DATE 03 MAY 75 TABULATED STURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1537

1.250

ARC11-D14TA19 DTS+STRUT SRB-OFF MPS-OFF SRB BASE (REUK25) ( D4 FEB 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT

#### FARAMETRIC DATA

1.000

.000 ELV-08 =

ELV-IB =

RUDDER =

GIMBAL =

	Ξ	17	290			YMRF	; <b>3</b> .	= -	.0000 499.0000	IN.	YT ZT	
SECT	OV	1 (	1)	SRB BAS	E .				DEPE	NDE	NT VAR	IABLE CF
ALPHA	(	1)	=	-3.975	BETA	(1)	=	•	993		SE	1,000
				•							כמ י	
											םמפ.	5018
											, כמפ	5134
	•											5037
	:									624	מסמ,	5256
ALPHA	ţ.	2)	=	255	BETA	(1)	=	-4.	פפפ	BA	SE	1.000
											CN =	
												5070
										622	.000	5948
												4962
										624	פפפ.	5154
ALPHA	(	2)	=	285	BETA	( 2)	=		012	BA:	SE	1.000
										TA	CN =	
										621	מממ.	5186
										622	בככ.	5171
										623	מממ.	5128
										624	מפפ.	5246
ALPHA	(	2)	=	189	BETA	( 3):	=	4.	931	BA:	SE	1.000
										TAF	CN =	
								•		621	.ססס	5159
										622	.ססס	5229
										623	מפפי.	5332
				•						624	.ספפ	5409
AI FHA	ť	3)	=	4.005	BETA	(1)	=	٠.	003	BAS	SE	1,000
	•					••		•	-		CN F	
								*			-	5493
												5497
										-	-	5390
												5525
										- / ·		

פספ.

1.400

ARC11-8141A19 OTS+STRUT SRB-OFF MFS-OFF SRB BASE

(REUK26) ( 04 FEB 75 )

#### REFERENCE DATA

## PARAMETRIC DATA

# &C-VJ3 BOD. - HOAM COO.

ELV-18 =

GIMBA' = 1,000

SREF = 2690 LREF = 1290 BREF = 1290 SCALE =	1,3000 IN.	XMRP = YMRP = ZMRP =	.0000	IN. YT	
SECTION ( 1)	SRB BASE		りをう	ENDENT VAR	IABLE CO
ALPHA (1) =	-3.909 BETA	(1) =	9009	BASE CA PAT	1.000
	•			621.000	4185
				622.000	4338
				623.000	
				624.000	4294
ALPHA ( 2) =	243 BETA	(1) = -	4.000	BASE	1,000
				TAP NO	
				621.000	4095
	• •			622.000	423
				623.000	3932
				624.000	4129
			•		
ALFHA ( 2) =	237 BETA	(2) =	.012	BASE	1.000
				TAP NO	
				621.000	
				622.009	4368
			•	623.000	4373
				624.000	4429
ALFHA ( 2) =	234 BETA	(3) = 4	.031	BASE	1,999
	•1:		,	CA SAT	
				621.999	4452
				622.090	4499
				623,000	4541
				624.000	4614
ALPHA ( 3) =	4.047 BETA	(1)=	.006	BASE	1.000
				TAP NO	. ,
	**			621,000	4665
				622.000	4627
				623.000	4558
				624,000	4637



DATE OF MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-D14 )

PAGE 1539

ARCII-DIATATO OTS+STRUT SRB-NOW MES-NOW SRB BASE

(REUK27) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

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1.000

ELV-18 =

GIMBAL =

= 80-V13 000.

SREF = 2690.0000 50.FT.	Vuct - 076	DOOR TEL UT	
LREF = 1290.3000 IN.	ANTI - 310	און ענינעי און און מענעי	
BREF = 1290.3000 IN.	YMRP = 400,	אן אוו פפנפי מון מונים	
SCALE = .0200	£1444 = 4551,	מממט זיאי עו	
102,33			
SEAR EPECE ) NCITOSE		DEFENDENT VARIABLE	CF
ALPHA ( 1) = -4.125 BETA	(1) = .995	5ASE 1.000	
		CM FAT	
		621.000419	_
		622.000514	
		623 .000423	
		624.000435	3
ALFHA ( 2) =396 BETA	(1) = -4.993	BASE 1.000	
		TAF NO	
		621.000373	7
		622.000 -,429	)
		623.999365	4
		624.000373	5
ALFHA ( 2) = -,458 BETA	(2) = .009	BASE 1.000	
		TAP NO	
		621.0003920	_
		622.9995599	
		623.0003797	7
		524.9903983	5
ALPHA ( 2) =336 BETA	(3) = 4.925	BASE 1.000	
		CA SAT	
		621.0004624	
		622.0006173	3
		623.9904526	,
•		624.0004612	?
ALPHA ( 3) = 3.792 BETA	(1) =003	9855 1.000	
		TAP NO	
		621.0003936	
		622.0005879	
		623.0003867	
		624.0004016	

1:

.999

1,100

BASE ACC11-014TA19 OTS+STRUT SEB-NOM MES-NOM SEB BASE

(REUK28) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

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.000 000,1

ELV-IB =

RUDDER = GIMBAL =

SREF = 2690.0000 50.FT.	XMRF = 976.000	D IN. XT	
LREF = 1290.3000 IN.			
BREF = 1290.3000 IN.	YMRF = .000 ZMRP = 400.000	D IN. ZT	
SCALE = .D2DD			
SECTION ( 1) SRB BASE	DE	PENDENT VAR	TABLE CF
ALPHA ( 1) = -4.191 BETA	(1) = .003	BASE	1,000
		CH PAT	
		621.000	- 4521
		622.333	
			4495
		624.000	4741
ALPHA ( 2) =465 BETA	(1) = -4.993	BASE	1.900
		TAP NO	
		621.000	4308
			5127
		623.000	4177
		624.000	4342
ALPHA ( 2) =447 BETA	(2) = .012	BASE	1.000
		TAP NO	
		621.000	4644
			5009
		623.000	4423
		624,000	4777
ALPHA ( 2) =405 BETA	(3) = 4.931	BASE	1,000
		TAP NO	
		621.000	5197
	•	622,000	5329
•		623.000	4950
		624.000	5317
ALPHA ( 3) = 3.819 BETA	(1) = .009	BASE	1.000
The second secon	1000	TAP NO	
		621.000	4774
			5146
			4524
		624.000	4889
	•		

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## TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1541

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1.259

ARC11-014TA19 OTS+STRUT SRB-NOW MES-NOW SRB BASE

(REUK29) ( 04 FEB 75 )

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25	-1 E N	r.e.	UAI	ı A

## PARAMETRIC DATA

1.000

.000 ELV-08 =

.000 MACH =

SREF = 2690.0000 50.FT. LREF = 1290.3000 TN. BREF = 1290.3000 TN. SCALE = .0200	XMRP = 976.0000 IN. YMRP = .0000 IN. ZMRP = 400.0000 IN.	YT	ELV-IB = RUDDER = GIMBAL =
SECTION ( 1) SRB BASE	DEFENDE	INT VARIABLE CP	
ALPHA ( 1) = -4.989 BETA		ISE 1,000	
		IF NO	
		.0002992	50
		.0003133	<b>3</b> 5
		.0002801	# H
	624	1.0003082 <b>C</b>	5 립
ALPHA ( 2) =375 BETA	(1) = -3.997 BA	ISE 1,000	ORIGINAL PAGE IS
	TAI	F NO	, [
	621	.9992839	.0
	622	.0003017	A
	623	.9992689	$\mathbf{\mathfrak{L}}$
	624	.0003012	(3)
		×	IS
ALFHA ( 2) =408 BETA	(2) = .012 BAS		
		F NO	
		.9992977	
		.9093293	
	623	.0002780	
	624.	.9903979	•
ALPHA ( 2) =381 BETA			
		<sup>2</sup> CN <sup>2</sup>	
		.9993721	
		.9993775	
		.0003595	
	624.	.0003927	
ALPHA ( 3) = 3.843 BETA	/ 1) - 003		•
ACI (1 1 2 - 3.043 BE)A			
		* NO	•
		.0003249	
•	622.		
		.0002958	•
	524.	0003348	,

DATE	23	MAY	7:

## TABULATED SOURCE FRESSURE DATA - 1419 ( ARC 11-014 )

PAGE 1542

1.400

32AB BRC NCM-27M NCM-BPC TUPTC+STO CIAIAIID-110PA

(REUK30) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

LREF	=======================================	129	0000.0 0005.0 0006.0 0000.		XM YM ZM	•	= '	כמימפ.	IN. XT IN. YT IN. ZT				ELV-IB = RUDDER = GIMBAL =	000, 000, 000,1	ELV08 = MACH =
SECTI	ON.	( 1)	598 8/	\SE			*	DEP	ENDENT VA	RIABLE CP					
ALPHA	( 1	1) =	-4.22	BETA	( 1)	· =	.006		BASE	1.000					
									TAP NO						
			•						621,000	1526					
									622,000	1994					
									623.000	1597					
									624.000	1719					
ALPHA	( 2	2) =	444	BETA	( 1)	=	-3.997		BASE	1,000					
									TAP NO					1000	
			•						621.000	1621				₹ ⊊	)
									622.000	1728				7	
		:							623.000	1395				O H	
									624.000	1615				22	
														₩ ₩	
ALPHA	( 2	:) <u>=</u>	405	BETA	( 2)	=	.016		BASE	1.000				ව 🔭	
									TAP NO			•		Z TO	
									621.000	1796				A 5	
									622.000	1979				马哥	
									623.000	1581				<b>B</b> I	
									624.000	1853				OF POOR QUALITY	
At Pass	, .	٠.	***	APS.	, _										
ALPHA	, 2	, =	560	BETA	(3)	=	4.031		BASE	1,000					
									CON SAT						
									621.000	2281					
									622.000	2339					
									623.000 624.000	-,2090					
									024 (333)	2318					
ALPHA	(-3	) =	3.819	BETA	(3)	=	.009		BASE	1.000	•				
		,			• • •	,	, 55		TAP NO	A 6 14 14 14 1					
					,				521.000	1969					-
									622.000	2112					
									623.999	1795					

624.000 -.2039

FAGE 1542

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1.400

ARC11-014TA19 OTS+STRUT SER-NOW MES-NOW SER BASE

(REUK39) ( 94 FEB 75 )

## REFERENCE DATA

## FARAMETRIC DATA

AND THE RESERVE THE PROPERTY OF THE PROPERTY O

	= -	1290 1290	.0000 0008. 0008. 0000	IN.	XMRP YMRP ZMRP	=	976.0000 ,0000 400,0000	IN. YT			ELV-IB = RUDDER = GIMBAL =	= 80-VL = 000. = H3AH 000. 000.1
SECTI	NC	(1)	SRB BA	SE			DEF	ENDENT VAR	TABLE CP			
ALPHA	( 1	1) =	-4.224	BETA	(1)	=	.996	BASE TAF NO	1.000			
								621.000 622.000 623.000	1526 1984 1597	•		
								624.000	1719	•		
ALPHÁ	( 8	2) =	444	BETA	(1)	= -3	.997	BASE TAP NO 621.000 622.000 623.000 624.000	1.000 1621 1728 1395 1615			ORIGINA ORIGINA
ALPHA	( 3	2) =	405	BETA	(2)	=	.016	9ASE TAP NO 621.000 622.000 623.000 624.000	1.000 1796 1979 1581 1853			ORIGINAL PAGE IS
ALPHA	( 2	?) =	360	BETA	(3)	= ,4	.031	BASE TAP NO 621.000 622.000 623.000 624.000	1,000 2281 2339 2090 2318			
ALPHA	( 5	3) =	3.819	BETA	(1)	<b>=</b> .	<b>.</b> 009	BASE TAP NO 621,000 622,000 623,000 624,000	1,000 1969 2112 1705 2039			

(1 )



DATE OS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

624.000 -.3058

FAGE 1543

ARC11-0141A19 OTS+STRUT SRB-OFF MRS-OFF SRB BASE (REUK31) ( 04 FEB 75 )

PARAMETRIC DATA

#### REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 976.0000 IN. XT EV-19 = . BO-VJE 000. LREE = 1290.3000 IN. TY . WI 0000 = 45MY RUDDER = - HACH = .900 . ZMRP = 400.0000 IN. 21 2,000 GIMBAL =

#### 9RET = 1290.3000 IN. SCALE # .0200 SECTION ( 1) SES BASE DEPENDENT VARIABLE CO ALPHA ( 1) = -4.020 SETA ( 1) = .006 9ASE 1.000 TAP NO 621,000 -.3191 622.000 -.4231 623.000 -.3269 624.000 -.2936 ALPHA ( 2) = -.288 BETA ( 1) = -4.003BASE TAP NO 621.000 -.2805 -.3895 622.000 623.000 -.3073 624,999 -.2833 ALPHA (2) = -.279 BETA (2) = .009 BASE 1.000 TAP NO 621.000 -.2792 622.000 -.3625 623.000 -.2977 624.000 -.2647 ALPHA ( 2) = -.264 BETA ( 3) = 4.031 BASE 1.000 CM PAT 621,000 -,3373. 622.000 -.3684 623.000 -.3355 624.000 -.3156 ALFHA ( 3) = 3.978 BETA ( 1) = .000 BASE CH PAT 621.000 -.3070 622.000 -.3733 623.999 -.3935

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٦	ATE	23	444	78

#### TABULATED SOURCE PRESSURE DATA - TAIR ( ARC 11-014 )

FAGE 1544

.000

1,100

ARC11-014TA19 DISHSTRUT SEB-OFF MIS-OFF SEB BASE

(REUK32) ( D4 FEB 75 )

ALPHA (3) = 3.981 BETA (1) = .000

RECERENCE DATA PARAMETRIC DATA ELY-DB = ELV-19 = פפפ. SMEF = 2690.0000 Sq.FT. X447 = 976.0000 IN. XT LREF = 1290.3000 IN. RUDDER = פפפ. MACH = Y447F = זץ או פפפם. BREE = 1290.3000 IN. ZMRP = 400.0000 IN. ZT GIMBAL = 2.000 SCALE = .0200 SECTION ( 1) SRB BASE DEPENDENT VARIABLE CP ALPHA (1) = -3.906 BETA (1) = .000 BASE 1.000 TAP NO 621.000 -.5805 622,000 -.5875 623,000 -.5705 524,000 -.5835 ALPHA ( 2) = -.255 BETA ( 1) = -4'.000 BASE 1,999 TAP NO 621.000 -.5145 -.5377 622.000 623.000 -.5216 624.000 -.5286 ALPHA (2) = -.213 BETA (2) = .009SASE 1.000 TAP NO 621.000 -.5242 622,000 -.5461 623.000 -.5312 524.000 -.5438 ALPHA ( 2) = -.219 BETA ( 3) = 4.028 5455 1.000 CH SAT 621,000 -.5252 622.000 -.5422 -.5397 623.000 624.000 -.5458

BASE

TAP NO 621.000

622.999 623.000

624,000

1,000

-.5326 -.5436

-.5257

-.5428





DATE 03, HAY 75

TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

FAGE 1545

.999

1.259

ARC11-0141A19 OTS+STRUT SRB-OFF MPS-OFF SRB BASE

(REUK33) ( 04 FEB 75 )

PARAMETRIC DATA

.000

2.000

= 80-VJ3 000.

MACH =

ELV-IB =

RUDDER =

GINBAL =

	REFERENCE DA	ATA		•	
LREF	= 2690.0000 SQ.FT. = 1290.3000 IN. = 1290.3000 IN. = .0200	XMRF = 976.0 YMRF = ,09 ZMRF = 400.0	IN. YT		
SECT	ION ( 1) SRB BASE		DEFENDENT VAR	IABLE CF	
AI BUA	( 1) = -4.044 BETA	•	BASE	•	
451-144	( 1)4.044 DEIA	(1) = .993	TAP NO	1.999	
				4947	
				5073	
			623.999		
				5182	
ALPHA	( 2) =198 BETA	(1) = -4.000	BASE	1.000	
			TAP NO		
			621.000	5040	
			622.000	5027	
			623.000	4890	
			624.000	5092	
ALPHA	( 2) =162 BETA	(2) = .009	BASE TAP NO	1.999	
			621.000	5198	
			622.000	5181	
			623.000	5136	
			624.993	5264	
ALPHA	( 2) =210 BETA	(3) = 4.031		1.000	
		1 1	CA PAT	5400	
		•	621.000 622.000	5198	
	•			5276	
				5356	
	•		0241	-,,,,,,	
ALPHA	( 3) = 3.846 BETA	(1) = .003	BASE	1.000	
			TAP NO		
			621.000	5434	
			622.000	5365	
			623.000	5359	
			624.000	5475	

1.400

32AB BRS 75-27F 47C-BRS TURTS+2TC PLAIAIR-117PA

(REUK34) ( 04 FEB 75 )

MACH =

# REFERENCE DATA

## PARAMETRIC DATA

.000 .000

2.000

ELV-IB = RUDDER = GIMBAL =

SREF	=	2695	מפפפי, ב	sa.FT.	XMER	= 976	.9990 IN.	YŤ		
REF	=	1295	2,3000	tn.	YMR		.או ממפפ.			
			2.3000		ZMRF	= 4 <u>0</u> 0	.0000 IN.			
SCALE			.0200		2			۲.	•	
SECT	ton	( 1)	SRB BA	ISE .			DEFENDE	IT VAR	IABLE CP	
ALFHA	( 1	1) =	-3.981	BETA	(1) =	.000	BAS	SE	1.000	
	٠.						TAP	CN =		
									4157	
								ממם.	4316	
							623	ממם.	4202	
								פפפ.	4264	
ALFHA	( 2	?) =	231	BETA	(1) =	-4.999	BAS	ŝΕ	1.000	
							TAF	C/A	• • • • • • • • • • • • • • • • • • • •	
					* :		621.	.000	4104	
							622 .	.000	4246	
			•		•		623.	.000	3938	•
							624.	בכם.	4145	
							5.0			
ALFHA	( 2	:) =	231	BETA.	(2) =	.009	BAS	E	1.000	
							TAP	CN		
							621.	מממ	4495	
									4343	
							623.		4333	
							624.	ממפ	4493	
U_I-MA	( 2	, =	219	BETA	(3) =	4.028	BAS	-	1.000	
							TAP			
							621.		4469	
							622.		4510	
							623.		4547	
							624.	סמפ	4696	
I SHA	, ,		3:030	DETA	(1) =			_		
Seria.	3.	, =	3.337	DETA	(1)=	.093	BAS		1.000	
							TAP			
		1					621.		4668	
					•				4612	
							623.		4573	
							624.	פפנ	4548	

DATE 03 MAY 75

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1547

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ARCI 1-DI 41A19 DTS+STRUT SRB-NOM NOS-NOM SRB BASE

(REUK35). ( D4 FEB 75 )

# REFERENCE DATA

SREF = 2690.0000 50.FT. XMRF = 976.0000 IN. XT

# PARAMETRIC DATA

.000 2.000

ELV-IB = RUCCER = GINBAL =

	=	1299	.3000 I I CCCE. CCSC.		YMR ZMR	F	=	499.		IN. YT IN. ZT	
SECT	(Ch	(1)	SRB BAS	Ε					DEF	ENDENT V	ARIABLE CP
ALPHA	( - 1	() =	-4.308	BETA	( 1)	=		.009		BASE	1.999
										TAP NO	ı
	•									621.000	4297
•										622,000	
										623.999	4291
										624.999	4397
ÄLFHA	( 2	<u>:</u> ) =	393	BETA	(1)	.=	-4	.000		BASE	1.000
										TAF NO	
										621.000	3974
										622.000	4730
										623.000	3814
										624.000	3964
ALPHA	( 2	2) =	-,384	BETA	( 2)	=		.912		BASE TAP NO	1.000
										621 .000	3946
										622,000	-
				•							3977
										624.000	4957 .
ALFHA	( 2	) <u>:</u> =	345	BETA	( 3)	= ,	4.	.025		BASE	1.000
										TAP NO	
										621.000	4735
							•			622.000	6352
										623.000	4765
										624.000	4836
ALPHA	( 3	) =	3.903	BETA	(1)	=		006		BASE	1,900
			•							TAP NO	
										621.000	
											5934
								-			4059
			• .							624.000	4252

ORIGINAL QUALT

**X** 

000. = 80-VJ3

ARC11-014TA19 OTS+STRUT SRB-NOM MPS-NOM SRB BASE (REUK36) ( 04 FEB 75 )

## REFERENCE DATA

# PARAMETRIC DATA

SECTION ( 1) SQB SASE DEFAN ( 1) = .003  ALPHA ( 1) = -4.008 BETA ( 1) = .003  BASE 1.000  TAP NO 521.0004682 622.0005023 623.0004522 624.0004847  ALPHA ( 2) =342 SETA ( 1) = -4.000  ALPHA ( 2) =318 SETA ( 2) = .012  BASE 1.000  TAP NO 621.0004417 622.0004946 623.0004946 624.000478 624.0004892  ALPHA ( 2) =318 SETA ( 2) = .012  BASE 1.000  TAP NO 621.0004596 622.0004899 623.0004519 624.0004899 623.0004519 624.0005236 623.0005236	SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200	XMRP = 976.0000 IN. XT YMRP = .0000 IN. YT ZMRP = 400.0000 IN. ZT	•	ELV-IB = .000 RUDDER = .000 GIMBAL = 2.000
TAF NO 621.0004682 622.0005023 623.0004522 624.0004847  ALPHA (2) =342 SETA (1) = -4.000  ALPHA (2) =316 SETA (2) = .012  ALPHA (2) =316 SETA (3) = 4.031  ALPHA (2) =417 SETA (3) = 4.031  ALPHA (3) = 3.717 SETA (1) = .000  BASE 1.000 FAR NO 621.0004492  BASE 1.000 FAR NO 621.0004596 622.0004693 623.0004697  FAR NO 621.0004596 622.0004697 624.0004697  FAR NO 621.0005236 623.0004697  FAR NO 621.0005236 623.0003272  ALPHA (3) = 3.717 SETA (1) = .000  BASE 1.000 TAF NO 621.0005272  ALPHA (3) = 3.717 SETA (1) = .000  BASE 1.000 TAF NO 621.0004691 622.0004691 623.0004691 623.0004619	SECTION ( 1) SRB BASE	DEPENDENT VA	RIABLE CF	
623.0004278 624.0004492  ALPHA (2) =318 BETA (2) = .012 BASE 1.000 TAP NO 621.0004596 622.0004889 623.0004319 624.0004687  ALPHA (2) =417 BETA (3) = 4.031 BASE 1.000 TAP NO 621.0005111 622.0005236 623.0004927 624.0005272  ALPHA (3) = 3.717 BETA (1) = .000 BASE 1.000 TAP NO 621.0005272	ALPHA ( 1) = -4.008 BETA	CA PAT 000.128 000.528 000.528	4682 5023 4522	ORIGIN OF POC
623.0004278 624.0004492  ALPHA (2) =318 BETA (2) = .012 BASE 1.000 TAP NO 621.0004596 622.0004889 623.0004319 624.0004687  ALPHA (2) =417 BETA (3) = 4.031 BASE 1.000 TAP NO 621.0005111 622.0005236 623.0004927 624.0005272  ALPHA (3) = 3.717 BETA (1) = .000 BASE 1.000 TAP NO 621.0005272	ALPHA ( 2) =342 9ETA	(1) = -4.000 BASE TAP NO	1,000	AL TA
TAF NO 621.0004596 622.0004888 623.0004519 624.0004687  ALPHA (2) =417 BETA (3) = 4.031 BASE 1.000 TAP NO 621.0005111 622.0005236 623.0004927 624.0005272  ALPHA (3) = 3.717 BETA (1) = .000 BASE 1.000 TAF NO 621.0005272		622.000 623.000	4946 4278	- '
623.0004319 624.0004687  ALPHA (2) =417 BETA (3) = 4.031 BASE 1.000  TAP NO 621.0005111 622.0005236 623.0004927 624.0005272  ALPHA (3) = 3.717 BETA (1) = .000 BASE 1.000  TAP NO 621.0004911 522.0005244 623.0004619	ALPHA ( 2) =318 DETA	TAF NO CDC. 129	~.4596	
TAP NO 621.0005111 622.0005236 623.0004927 624.0005272  ALPHA (3) = 3.717 BETA (1) = .000 BASE 1.000 TAP NO 621.0004991 522.0005244 623.0004619		623.000	-,4319	
624.0005272  ALPHA (3) = 3.717 BETA (1) = .000 BASE 1.000  TAP NO 621.0004991 522.0005244 623.0004619	ALPHA ( 2) =417 BETA	CA PAT 000.129 000.529	5111 5236	
TAF NO 621.0004991 522.0005244 623.0004619	ALPHA ( 3) = 3.717 BETA	624.000	5272	
CA COC ECCA		621,000 622,000 623,000	5244 4619	





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DATE DE MAY 75

# TABULATED SOURCE PRESSURE DATA - 1A19 ( ARC 11-014 )

PAGE 1549

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BAR ERE MCH-ETH MCH-BRE TUPTE+ETC ELAILLIC-LICEA

(REUK37) ( 04 FEB 75 )

ELV-OB =

MACH =

# REFERENCE DATA

# PARAMETRIC DATA

.ססס

כפפ.

2.200

ELV-18 =

RUDDER =

GTIBAL =

SREF = 2690.0000 Sq.FT. XMRP = 97 LREF = 1290.3000 IN. YMRP = SREF = 1290.3000 IN. ZMRP = 40 SCALE = .0200	יאן מפפפ.
SECTION ( 1)SER BASE	DEPENDENT VARIABLE CP
ALFHA ( 1) = -4.145 BETA ( 1) = .006	BASE 1.000
	TAF NO TAF
	621.0003287 H
	622.0003273
	623.0003012
	FASE 1.0003287 POR 1.000 TAP NO 621.0003298 622.0003298 622.0003148
	# P
ALPHA ( 2) =414 BETA ( 1) = -4.003	SASE 1.000
	TAP NO
	621.0002998
	622.0003148
	623.0002789
	624.0003153
ALPHA ( 2) =459 BETA ( 2) = .009	BASE 1.000
	TAP NO
	621.0003217
	622.0003353
	623.0002987
	624.0003288
ALPHA (2) =468 BETA (3) = 4.028	SASE 1.000
	CN FAT
	621.0003731
	622.0003729
	623,000 -,3601
	624.9993814
ALPHA ( 3) = 3.864 SETA ( 1) = .003	BASE 1,000
	TAP NO
	621.0003499
	522.0003665
	623.0003189
	624.0003643

PAGE 1550

.000

1.499

ARC11-0141A19 OTS+STRUT SEB-NON MES-NOM SEB BASE

(REUK38) ( 04 FEB 75 )

MACH =

# REFERENCE DATA

## FARAMETRIC DATA

.ססס

2.000

ELV-IB = RUDDER = GIMBAL =

ORIGINAL FOOR QUA

.000 ELV-08 =

SREF       =       2690.0000 SQ.FT.         LREF       =       1290.3000 IN.         BREF       =       1290.3000 IN.         SCALE       =       .0200	XMRP = 976.0000 IN, XI YMRP = .0000 IN, YT ZMRP = 400.0000 IN, ZT	
SECTION ( 1) SRB BASE	DEFENDENT VA	RIABLE CF
ALFHA ( 1) = -4.155 BETA	(1) = .003 BASE CA PAT CCC.123 CCC.223 CCC.623	1983
	624.000	
ALFHA ( 2) =387 BETA	(1) = -4.000 BASE TAP NO 621.000 622.000 623.000 624.000	1379 1577 1226
ALPHA (2) =318 BETA	BASE TAF NO 621.000 622.000 623.000 624.000	2013 1649
ALPHA ( 2) =354 BETA	(3) = 4.931 BASE TAF NO 621.999 623.999 623.999 624.999	2358
ALFHA ( 3) = 3.939 BETA	7AF NO 000.156 000.256	2047 1604





DATE 03 HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

623.000 -.3020 624.000 -.2999 PAGE 1551

3412	المداد خه	•		170074	ICA SOUNG	E 1 4633016 3	714 - 14+2	1 114 -		
					ARCI	1-0141A19 OT	s sq!	B-OFF NE	S-OFF SEB BAS	E
		REFERE	NCE DA	ITA		•				
SOFF	= 260	ี . กากกก	o FT	YMBS	= 976.5	990 IN. XT				ELV-1
		3.3000 1		YMEF		DOD IN. YT				RUDDE
		1 2025.0		ZMRP		זי או פפפל				GINBA
SCALE		.9299	•	2190			•			· · · · · ·
SECTI	ION ( 1)	SRB BAS	E .			DEPENDENT VA	TABLE CF			
AI PHA	(4) =	_8 139	RETA	(1)=	.000	BASE	1.000	•		
ACI IIA	, ., -	-0.133	5514	( 17 -	,,,,,,	TAF NO	4.333		, .	
	٠.					621.000	3107			
						622.000	4329			
						623.000	3245		A -	
						624.000	2962		30	
						024.555	2502		ORIGINAL PAGE IS OF POOR QUALITY	
ALPHA	(2) =	-4.032	BETA	(1) =	.000	BASE	1.000		0 23	
						TAP NO			Ø.₹	
						621.999	2947	•	æ <u>₽</u>	
							+.3925		D .	
						623,000	3051		. C P	
						624.999	2693		A A	
									$\Xi \Xi$	
ALPHA	(3) =	228	BETA	(1)=	-4.993	BASE	1.000		13 (4)	
		11.		• -		TAP NO	•		75 E	
						621 .000	2873		-2	
						622.000	3536			
						623.000	2929			
						624.000	2845			
						30 111-4				
AI_PHA	(3) =	249	BETA	(2) =	.012	BASE	1.999			
				· •••		TAP NO				
						621.000	2876			
		*				622.000	3694			
						623.000	2972			
					•	624.000	2792			
						0241333				
AI PHA	(3) =	261	BETA	(3) =	4.028	BASE	1.000			
7-21 107	. • .					TAF NO	• • • • • • • • • • • • • • • • • • • •			
						621.000	3693			
						622,000	3743			
						623.000	3557			
•						624,000	3316			
		•				924.171	7710			
ALPHA	(4) =	4.032	BETA	(1) =	.993	BASE	1,000			
				. ••		TAP NO				
						621.000	3942			
	•					622.000	3594			
						Vaca s visitely				

PARAMETRIC DATA

ELV-18 = .000 ELV-08 = .000 RUCCER = .000 MACH = .000

(REUK39) ( D4 FEB 75 )

GIMBAL = 1.000

ARC11-014TA19 OTS SRB-OFF MES-OFF SRB BASE

(REUK39)

SECTION ( 1) SRB BASE

DEPENDENT VARIABLE CF

ALPHA ( 5) = 7.920 BETA ( 1) = .003

B4SE 1.000

CM 9AT

621.000 -.3482

622.000 -.4277

623.000 -.3577

624.000 -.3466

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1.100

ARC11-014TA19 OTS SRB-OFF MIS-OFF SRB BASE

(REUK40) ( 04 FEB 75 )

# REFERENCE DATA

# FARAMETRIC DATA

מכס.

1.000

ELV-18 = RUDDER =

GINBAL =

	9999 IN. XT	and the second
	9999 IN. YT	
	9999 IN. ZT	
SCALE = .0200		
SECTION ( 1) SEB BASE	DEPENDENT VARIABLE CP	
	SELECTION AUGUSTE CITY	
ALFHA ( 1) = -7.992 BETA ( 1) = .003	BASE 1.000	
	CN FIAT	
	521.0005464	O Q.
	622.0005666	0 <del>8</del> 0
	623.9905447	ਜ਼ਰੀ
the state of the s	624.9995398	ORIGINAL OF POOR
ALFHA ( 2) = -4.080 BETA ( 1) = .003	BASE 1.000	
	CO SAT	
	621.0005654	QUALI
	622.0005735	JA A
	623.0005574	日出
	624.0005704	<b>H</b>
	0241033 13114	ALLY
ALPHA (3) =225 BETA (1) = -4.000	BASE 1.000	•
	TAP NO	
	621.0005313	
	622,9995598	
	623.0005269	
	624,0005432	
ALPHA (3) =159 BETA (2) = .012		
ALIHA (3) =159 BETA (2) = .012	BASE 1,000	
	TAP NO	
	621.0005451	
	622.0005644	
	623,000 -,5509	
	624,000 -,5512	
ALPHA (3) =312 BETA (3) = 4.028	BASE . 1.000	
	TAP NO	
	622,9995543	
	523,000 -,5419	
	624.0005555	
ALGHA (4) = 3.88\$ BETA (1) = .000	DACE 4 000	
( 17uuu	BASE 1,000	
	TAP NO	
	621.0005505	
	622,500 -,5740	
	623,0005551	
	624 707 - 5744	

FAGE 1554

ARC11-0141A19 OTS SRB-OFF MRS-OFF SRB BASE (REUK40)

SECTION ( 1) SAB BASE

DEPENDENT VARIABLE CF

ALPHA ( 5) = 8.073 BETA ( 1) = .000 BASE . 1.000

TAP NO 621.000 -.6042 622,000 -.6137 623,000 -.5895 624.000 -.6023

PAGE 1555

1.250

ARC11-D14TA19 DTS STB-DFF MPS-DFF STB BASE (REUK41) ( D4 FEB 75 )

= 80-V\_3 000. = HOAM 000.

## REFERENCE DATA

# FARAMETRIC DATA

1.000

ELV-IB = RUDDER = GIMBAL =

SREF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. SCALE = .0200		IN. YT	
SECTION ( 1) SEB BASE	DEP	ENDENT VARIABLE CF	
ALPHA ( 1) = -8.232 BETA	(1) =996	BASE 1.000 TAP NO	
		621.0005010 622.0005035	
		623.0004899 624.0005003	
ALPHA ( 2) = -4.098 BETA	(1) =006	BASE 1.000 TAP NO	
		621.0004912 622.0005035 623.0004985	
ALPHA ( 3) = -,243 BETA	(1) = -4.999	524.0005137 BASE 1.000	10 P
		TAP NO 621.0004918 522.0004993	POO
		623.0994773 624.0994991	RIGINAL PAGE 1 F POOR QUALITY
ALPHA ( 3) =171 BETA	(2) = .012	DASE 1.000 CM PAT	'AGE 'ALI
	•	621.0005187 622.0005179 623.0005124	SI
	•	624.0005252	
ALPHA ( 3) =171 BETA	(3) = 4.025	PASE 1,000 TAP NO 621,0005214	
		622.0005275 623.0005396	
ALPHA ( 4) = 7.860 BETA	(1) = ~,003	624.0005470 BASE 1.000	
2012 C 47 - 1.000 2514	( 17 - ~,555	TAP NO5960	
		622.0005950 623.0005722 624.0005917	
• • • • • • • • • • • • • • • • • • •			

ARC11-D14TA19 OTS

SEB-OFF MIS-OFF SEB BASE

(REUK42) ( D4 FEB 75 )

# REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT YMRF = דץ או פפכפ. LREF = 1290.3000 IN. 7M9F = 400 0000 IN. 7T

BREF SCALE		290	ז מממנ. ממצת.	Ν.	ZMRI	• 1	= 459.	וא פפפס IN. ZI	
SECTI	ioh c	13	SRB BAS	E				DEPENDENT VAR	TABLE CF
ALPHA	(1)	=	~4.059	BETA	(1)	=	.000	BASE	1.000
								CM PAT	
								621.000	4157
								622.999	4357
								623.500	- 4196
								624.000	4250
ALPHA	( 2)	=	183	BÉTA	(1)	=	-3.997	BASE	1.000
								CH PAT	
								621.999	3973
								622.999	4214
								623.000	3939
								624.000	-,4006
A! PHA	( 2)	=	195	BETA	( 2)	=	.012	BASE	1.000
7, =1 7,17			••••					TAP NO	
								621,000	-,4405
								622,000	-,4364
								623.000	~.4325
								624,000	4494
ALPHA	(-2)	=	.027	BETA	(3)	=	4.028	BASE	1.000
								CH FAT	
								621,000	
								622,000	4591
								623.000	4514
								624,000	4693
ALPHA	( 3)	=	3,924	BETA	(1)	=	.003	BASE	1.000
								CH PAT	
								621.000	-,4577
				•				522,000	4515
		•						623.999	4473
								624,000	4571
ALPHA	( 4)	=	7.809	BETA	(11)	=	.003	BASE	1.000
								CVI SAT	
								521.000	
								622.000	-,4724
								623,090	4574
								624,000	4819

PARAMETRIC DATA

= 80-VJ3 000. ELV-IB = - אאר פפני 1.400 RUDDER = GIMBAL = 1.000

OF POOR QUALITY

\*\*\*\*

DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1557

ARC11-D14TA19 OTS

SRB-NOW MES-OFF SRB BASE

(REUK43) ( D4 FEB 75 )

## REFERENCE DATA

SCALE = .0200	LREF =	2690.0000 1290.3000 1290.3000	tn.	YMEF	=	976, 0000 ,0000 400,0000	IN.	ΥT
---------------	--------	-------------------------------------	-----	------	---	--------------------------------	-----	----

## PARAMETRIC DATA

ELV-IB =	.000	ELV-08	=	.000
<b>RUDDER</b> =	.000	MACH	=	.900
GIMBAL =	1,000			

## SECTION ( 1) SRB BASE

## DEFENDENT VARIABLE CF

BASE

1.000

TAP NO 621,000 -.3924 622,000 -.5976 623,000 -.3797

524,000 -.3957

2501104 ( 11240 042C	33 212211 11, 101122
ALPHA (1) = -8.133 BETA (1) = .003	BASE 1.000 TAP NO
	621,0004727
	622.0005633
	623.0004772
	624.9994999
ALPHA (2) = -4.902 BETA (1) = .993	BASE 1.000 TAP NO
	621.0003760
	622,0005511
•	623.0003764
	624.0003904
ALPHA (3) =342 BETA (1) = -4.990	BASE 1.000 CM FAT
	621.0003747
	622.000 -45449
	623.0003677
	624.0003816
ALPHA (3) =357 BETA (2) = .012	BASE 1.000 TAR NO
	621.0003797
	622.0005766
	623.0003909
	624.0003936
ALPHA ( 3) =288 DETA ( 3) = 4.922	BASE 1.000
	TAP NO
	621.0004926
•	622.0006226
	623.0004810
	624.0005001

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OF POOR QUALITY

7.

DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - 1419 ( ARC 11-014 )

FAGE 1558

ARC11-014TA19 OTS SEB-NOW MES-DEF SEB BASE

(REUK43)

SECTION ( 1) SAB BASE

DEPENDENT VARIABLE CP

ALPHA ( 5) = 7.962 BETA (1) = .000

BASE 1.000

TAP NO

621.000 -.4065

622,000 -.6022

623.000 -.3914

624.000 -.4069

# TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1559

IRC11-0141A19 O'S	SR9-N24	MPS-OFF	579	BASE	
• 1					

1.000

522.000 -.5353 523.000 -.4792 524.000 -.5154

SASE

521,000 -.5024 521,000 -.5353 (REUK44) ( D4 FEB 75 }

ALPH4 (-4) = 3.888 SETA (-1) = .000

 SQEF
 =
 2690.0000 SQ.FT.
 XMQP
 =
 976.0000 IN. XT

 LQEF
 =
 1290.3000 IN.
 YMQP
 =
 0000 IN. YT

 SQEF
 =
 1290.3000 IN.
 ZMQP
 =
 400.0000 IN. ZT

000 = 8C-V\_3 000 = 000 = 000 001.1 = MACH = 1.100 01984 = 1.000

PARAMETRIC DATA

SCA'\_E = .9200

SECTION ( 1) SES BASE

DEPENDENT VARIABLE CO

BASE ALPHA (1) = -8.196 SETA (1) = .999TAP NO -.4914 621 .000 -.5170 622.000 -.3936 623.000 624.000 -,4112 1,000 BASE ALPHA ( 2) = -4.038 BETA ( 1) = .000 CH TAT -.4436 621.000 622.000 -.4829 -.4350 623.000 -.4623 624.000 BASE 1,000 ALPHA ( 3) = -.363 BETA ( 1) = -4.903 TAP NO 621.000 -.4334 -, 4963 622,000 -.4207 623,000 624.900 -.4433 BASE ALPHA ( 3) = -.365 BETA ( 2) = .012 1.000 TAP NO -.4684 621,000 622.000 -.5010 523,000 -.4463 -.4901 624.000 SASE 1.000 ALPHA (3) = -.393 SETA (3) = 4.922 TAP NO 621.000 -.5238 -.5297 622.000 523.000 -.5955 524.000 - . 53 50

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FAGE 1560

ARC11-D14TA19 DTS

SRB-NOM WES-OFF SRB BASE

(350544)

SECTION ( 1) SAB BASE

DEPENDENT VARIABLE CF

ALPHA ( 5) = 7.977 BETA ( 1) = .000

BASE 1.000

CV SAT

621.000 -.5337

522.000 -.5612

623,000 -.5092

524,000 -.5309

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DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1561

, 222

1.259

ARC11-D14TA19 OTS SRB-NO4 MFS-OFF SRB BASE (REUK45) ( D4 FEB 75 )

MACH =

## REFERENCE DATA

## FARAMETRIC DATA

.ספפ.

1.000

.000 ELV-08 =

LREF = 1290.3000 IN. YMRF = .00	999 IN. XT 999 IN. YT 999 IN. ZT			ELV-IB = RUDDER = . GIMBAL =
SECTION ( 1) SEB BASE	DEPENDENT VA	RIABLE CF		
ALPHA ( 1) = -8.244 BETA ( 1) =009	BASE	1.000		
	CA TAT		•	
	621.000	2990		90
	622.000	3184		77 E
	623.000	2953		ත් ධ්
	624.000	3023		ORIGINAL PAGE IS OF POOR QUALLTY
ALPHA ( 2) = -3.935 BETA ( 1) =009	BASE	• 000		R ≥
2 1 1 1 2 2 3 3 3 5 1 K ( 1) 2 2 4 3 3 3	CA SAT	1.000		الم الم
	621.000	3005		₩. ₩.
		_		IA A
	622.000	3195		ĿΩ
	623.000	2798		7 6
	624.000	3971		id 3
ALPHA (3) =309 BETA (1) = -4.000	BASE TAP NO	1.000		
	621.000	2620		
	622.000	2870		
	623.000	2394		
	624,999	2644		
ALPHA ( 3) =360 BETA ( 2) = .909	BASE CA PAT	1.000		
	621.000	3055		
	622.000	3229		
	623.000	2993	•	
	624.000	3135		
ALFHA ( 3) =495 BETA ( 3) = 4.925	BASE	1,000		
	CA FAT			•
	621.000	3718		
	622,000	3599		
	623.000	3654		
	524.000	3765		
ALGHA ( 4) = 3.87 BETA: ( 1) = .000	BASE	1,000		
	TAP NO			
	621.000	3397		
	522.000	3499		
	623.999	3015		
	624.000	7.00		

524.000 -.3429

DATE 03 MAY 75 TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

FAGE 1562

ARC11-D141A19 DTS SRB-NOW MPS-OFF SRB BASE (REUK45)

SECTION ( 1) SEB BASE

DEPENDENT VARIABLE CP

ALPHA ( 5) = 7.989 BETA ( 1) = .000

BASE 1.000

TAP NO 621.000 -.3745

622.000 -.3894 623.000 -.3408

624.999 -.3652

DATE 03 HAY 75

TABULATED SOURCE PRESSURE DATA - IA19 ( ARC 11-014 )

623.909 -.1559

FAGE 1563

.000

1.499

(REUK46) ( 04 FEB 75 )

MACH =

= 80-V\_B 000.

PARAMETRIC DATA

. פפפ

1.000

ELV-18 = RUDDER = GIMBAL =

7,,,		,,,	•		1112447	103 330	(65 (12336)2 0	**************************************	,,.		
						A <b>P</b>	C11-014TA19 OT	s s	(B-NO4 455-)	JFF SRB BAS!	Ē
			REFER	ENCE DA	TA						
SREF	-	2690	.0000	sa.FT.	XMRP	= 976	,ספפס, וא. אז	•		•	ELV-
			.3000		YMRF		יא או פפפפ.				RUDD
			.3000		ZMRP		.0000 IN. ZT				GIMB
SCALE			במצפי.		2.1	,					
SECT	NCI	(1)	SRB BA	SE			DEPENDENT VAN	ED BLEAT			
AL GUA	,	e (	75	DETA	(1) =	003	BASE	1.999			
mar rin	`:	*, -	-5.1/3	SEIN	(1) -	,,	TAP NO	1.000			
							621.000	1619			
							622.999	2083			
							623.999	1617			
							624.000	1705			
ALFHA	(	2) =	-4.002	BETA	( 1) =	.003	BASE TAP NO	1.000			
								1423			
					,		622.000	1832			
							623.000	1562			
							624.000	1644			
ALFHA	(	3) =	348	BETA	(1) =	-4 .993	BASE	1,000		*	
							CH PAT				
								1419			
							655.000	1626			
							623.000	1275			
							624.000	1497			
ALFHA	(	3) =	369	BETA	( 2) =	.016	BASE	1.000			
							CH FAT				
							621.000	1759			
							622.000	1929			
							623.000	1597			
							624.000	1821			
ÁLFHA	(	3) =	-,360	BETA	(3) =	4.028	BASE	1.000			
							CM FAT				
							621.000	2291			
							622.000	2275			
							623.000	2088			
							624.000	2253			
ALFHA	(	4) =	3.990	BETA	(1) =	.006	BASE	1.000			
							TAP NO				
								1945			
								2028			
							~~.				

FAGE 1564

STE-VOM MES-OFF STE BASE

(REUX46)

SECTION ( 1) SAB BASE

DEPENDENT VARIABLE CP

ALPHA ( 5) = 7.655 BETA ( 1) = .006

94SE 1.000

CH PAT

621.000 -.2279 622.000 -.2350

623.000 -.1928

624.000 -.2230

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DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TAIS ( ARC 11-014 )

624,000 -.4602

PAGE 1565

.000

1.400

ARC11-014TA19 OTS STB-OFF MPS-OFF STB DASE (REUK47) ( D4 FEB 75 )

MACH =

#### REFERENCE DATA

# PARAMETRIC DATA

פמפ. 1.000

ELV-19 =

RUDDER = GIMBAL =

8.000 ELV-08 =

SREF	= 26	כממב. מפ	SQ.FT.	XMRF	= 97	ככככ. פ	IN.	XT		
REF	= 12	90.3000	IN.	YMRE	=	במפקי.	īN.	YT		
37EF	= 12	90.3000	IN.	ZHRF						
SCA'LE		.0200					•	٠.		
ctrt	TON I	1) SRS BAS				neni		.( <b>P</b> - 1/4/		_
3201		TISKS MA	) <u> </u>			Selat	T.A.S.C.	AII AW.	RIASLE C	•
V_744	(1)	= -4.050	BETA	(1) =	003		945	2	1.000	
							TAP	, NO		
							521	מממ	4225	
							522.	מפפ	4445	
							623.	מממ	4279	
							624	פפפי	4323	
		_								
LITHA	(2)	=150	BETA	(1) =	-4 .999		SAS		1.000	
								NO		
								פפפ.	4012	
								פפפ	4182	
							-	ספפ.	3862	
							524.	מממ	4026	
LEHA	(2):	- 129	BETA	(2) =	.009		SAS	E	1.000	
							TAP		• • • • • •	
								מממ	4418	
								סממ	- 4496	
								כמפ	4395	
								מפפ	4401	
								-		
LPHA	(2) =	234	BETA	(3) =	4.028		BAS	<u> </u>	1.000	
							TAP	NЭ		
							621.	מכננ	4540	
							<b>522.</b>	מפמ	4517	
							623.	מממ	4542	
						-	624.	ממפ	4527	
C FOLIA	( 3) -	3.867	DETA		000					
	, 3, -	. 3,007	DEIN	( 1/ =	,פניני		BAS		1,000	
							TAF			
				•			521.		4591	
									- : 4554	
						- '	623 .!	000	4529	

.ססם

ARC11-014TA19 OTS SRB-NOW MES-OFF SRB BASE

(REUK48) ( 04 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT TREF = 1290.3000 IN. YMRP = .0000 IN. YT BREF = 1290.3000 IN. ZMRP = 400.0000 IN. ZT SCALE = .0200 DEPENDENT VARIABLE CF SECTION ( 1) SRB BASE 9ASE 1.000 ALPHA (1) = -4.145 BETA (1) = -.093TAP NO 621.000 -.1378 622.000 -.1893 623,000 -.1599 624.000 -.1633 BASE 1.000 ALPHA (2) = -.243 BETA (1) = -4.003CH PAT 621.000 -.1253 622.000 -.1565 623.000 -.1168 624.000 -.1377

ALPHA ( 2) = -.324 BETA ( 2) = .999

ALPHA ( 2) = -.435 BETA ( 3) = 4.025

ALPHA ( 3) = 4.032 BETA ( 1) = -.006

CH SAT 621,000 -.1867

622,500 -.2009 623.000 -.1622

1,000

-.1934 623.000 -.1587 624,500 -.1750

1,000

1.000

BASE

TAP NO 621.000 -.1692 622.000

BASE CM FIAT 621,000 -.2148 622.000 -.2219 623,000 -,1981 624.000 -.2200

BASE

624,000 -.1975

PARAMETRIC DATA

8.000 ELV-08 = E V-IB = ,000 MACH = 1.400 RUDDER =

GIMBAL = 1.000





DATE 93 MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1567

4.000

ARC11-D14TA19 DTS SRB-DFF MPS-DFF SRB BASE (REUK49) ( D4 FEB 75 )

#### REFERENCE DATA

#### PARAMETRIC DATA

1,000

8.999 ELV-08 =

= אאר פפפ.

ELV-IB =

RUDDER = GIMBAL =

LREF = 1290.3000 IN. YMRF	= 976.0000 IN. XT = 0000 IN. YT = 400.000 IN. ZT	IABLE CP
ALFHA ( 1) = -4.041 BETA ( 1)	32 AB CCC. = CM FAT	1,999
	621.000	3275
	622.999	4225
	623,999	3325
	624.500	30in
ALPHA (2) =198 BETA (1)	= -4.003 BASE TAP NO	1.000 ORIGINAL PAGE 1.000
	621.000	- 3015 TE
		3723
		3039
	624.000	2923 Z A
		ع و
ALPHA ( 2) =162 BETA ( 2)	-	1.000
•	CN PAT	2007
		2967
	622 .000	3773
	623.000 624.000	3967 K E
	0241000	5022
ALFHA ( 2) =285 BETA ( 3)	= 4.022 BASE	1,000
	CA PAT	
		3597
		<b></b> 3675.
		3435
	624.000	3235
ALPHA (3) = 3.828 BETA (1)	22A8 €00 = CH =AT	1.000
	621,000	3166
		3656
		3050
	624,000	3055

4.000

1.100

ARC11-014TA19 OTS SRB-OFF WS-OFF SRB BASE

(REUK59) ( 04 FEB 75 )

MACH =

## REFERENCE DATA

## PARAMETRIC DATA

.000

1.000

= 8c-V\_3 000.8

LREF = 1	29.57. 0000.003. 290.3000 1N. 290.3000 1N. 290.300	YMRF =	.000 IN. XT 0000 IN. YT 0000 IN. ZT	ELV-IB = 8. RUDDER = ./ GIMBAL = 1.
SECTION (	1) SRB BASE		DEPENDENT VARIABLE CO	
ALPHA ( 1)	= -4.01* BETA	(1) = .003	BASE 1,000 TAP NO	ORIGINAL PAGE IS OF POOR QUALITY
			521.0005897	~ 2
			622.0005970	મ્ન વિં
			623.0005839	Q D
			624.0005913	ORIGINAL OF POOR
ALPHA ( 2)	=162 BETA	(1) = -4.000	9ASE 1.000	Q H
			CO PAT	I A
			621.0005458	වූ දි
			622,0005630	누면
			623.0005364	3 5
			624.9995528	7 8
ALPHA ( 2)	=141 BETA	sio. = (\$)	9ASE 1.000	
			TAP NO	
			621.0005537	
			622.9995799	
			623.9905579	
			624.0005679	
ALPHA ( 2)	=234 BETA	(3) = 4.025	BASE 1.000	
			TAP NO	
			621.0005684	
			622,0005849	
			623,0005735	
			624.0005969	
ALPHA ( 3)	= 3.879 BETA	(1) = ,000	BASE 1.000	
			TAP NO	
			621.0005773	
			622.0005834	
			523,0005624	
			624.0005948	



DATE 03 MAY 75

TABULATED SOURCE PRESSURE DATA - TAIR ( ARC 11-014 )

PAGE 1569

ARC11-014TA19 OTS

SRB-OFF MIS-OFF SRB BASE

(REUK51) ( D4 FEB 75 )

#### REFERENCE DATA

 SREF
 =
 2690.0000 SQ.FT.
 YARF
 =
 976.0000 IN. XT

 'REF
 =
 1290.3000 IN. YT
 YARF
 =
 .0000 IN. YT

 BREF
 =
 1290.3000 IN. ZT
 ZARF
 =
 400.0000 IN. ZT

 SCALE
 =
 .0000 IN. ZT
 XT
 XT

.

ELV-IB = 8.000 ELV-0B = 4.000 RUDDER = .000 MACH = 1.250 GIMBAL = 1.000

FARAMETRIC DATA

## SECTION ( 1) SRB BASE

#### DEPENDENT VARIABLE CP

ALPHA (1) = -4.000 BETA (1) = .000 BASE 1,000 CV SAT 621.000 -.5030 622.000 -.5103 623,000 -.5078 624.000 -.5187 ALPHA (2) = -.138 BETA (1) = -4.903BASE 1.000 CH PAT 621.000 -.4892 622,000 -.4991 623.000 -.4759 624.000 -.4740 SASE ALFHA (2) = -.225 BETA (2) = .009 1,000 CM SAT 621.000 -.5225 622,000 -.5184 623.000 -.5165 624.000 -.5284 1.000 ALPHA (2) = -.252 BETA (3) = 4.022BASE TAG NO 621.000 -.5122 622,500 -,5202 623.000 -.5264 524.000 -.5342  $A\_PHA$  ( 3) = 3.864 BETA ( 1) = .000 BASE 1.000 TAP NO 621.000 -.5480 622.000 -.5391 523.500 -.5395 524,000 -.5511

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624.000 -.4579

PAGE 1579

The Manual Control of the Control of

A9C11-014TA19 OTS

SEAR ESP SES HES-DE SES BASE

(REUK52) ( D4 FEB 75 )

FARAMETRIC DATA

## REFERENCE DATA

 SQEF = 2690.0000 SQ.FT.
 XMQF = 976.0000 IN. XT
 ELV-IS = 9.000 ELV-OB = 4.000

 LQEF = 1290.3000 IN.
 YMQF = 0.000 IN. YT
 QUODE = 0.000 YACH = 1.400

 BQEF = 1290.3000 IN.
 ZMQF = 400.0000 IN. Z\*
 GIMBAL = 1.000

 SCALE = 0.000
 .0000

THE:			ז מפפנ.ם ז מפפנ.מ		YMGF		יץ או פפפט. "א או פפפט, נ	
SCALE			.0200		471	- 455	113433 11, 4	
SECT	ion	( 1	one erac	E			DEPENDENT VA	FIADLE CF
ALFHA	(	1) =	~3.993	BETA	(1)=	.ססס	BASE CM FAT	1.000
							621,000	4200
							522.000	
							523,990	. ,
							524,000	
							च्यम स्थापन	-,-236
ALPHA	(,)	2) =	19	BETA	(1) =	-4.003	BASE CM PAT	1.000
							621.000	-,4019
							522,000	
							623 .000	
							624,000	4027
ALEMA	(	2) =	198	BETA	(2) =	.009	PASE	1.999
							CH SAT	
							621.000	4411
							622.900	
							623.000	
							624.000	4413
ALPHA	(	2) =	185	BETA	(3) =	4.022	3455	1,999
							CN FAT	
							621.000	
							622.000	
			_				623,990 624,999	-,4531 -,4521
							624.000	4521
AL EUR	,	<b>3</b> ) -	3.960	DETA	/ 13 -	000	BASE	1.000
ALITHA	٠,	J/	. 5.900	DETA	( 1) -	-000	CV 5VI	2 4
							621.999	~.4567
							622.000	
							623,000	



24 YAP 80 21AC

TABULATED SOURCE PRESSURE DATA - TAIR ( ARC 11-014 )

=4GE 1571

.900

25 EES 10 ( 15 EES 10 ) ( 15 EES 10 - 15 ) STOLET NEW-EPS 21C - 11374

## REFERENCE DATA

## FARAMETRIC DATA

8.000 ELV-DB =

# HOAM 000.

ELV-IB =

RUDDER =

GIMBAL = 1,000

SREF       =       2690.0000 Sg.FT.         LREF       =       1290.3000 IN.         BREF       =       1290.3000 IN.         SCALE       =       .0200	XMRP = 976.0000 IN. XT YMRP = 0000 IN. YT ZMRP = 400.0000 IN. ZT	
SECTION ( 1) SES BASE	DEPENDENT VARIABLE	CF.
ALPHA ( 1) = -4.179 BETA	(1) =003 BASE 1.000 TAP NO 621.000403 622.000593 623.000415 624.000433	30 55
ALPHA ( 2) =335 BETA	(1) = -3.997 BASE 1.000 TAF NO 621.000372 622.000547 623.000364 624.000373	24 72 48
ALFHA (2) = ~.360 BETA	(2) = .012	2 0 5
ALFHA ( 2) =411 BETA	(3) = 4.022 BASE 1.000 TAP NO 621.000461 622.000595 623.000471 624.000478	2 1 3
ALPHA ( 3) = 3,936 BETA	000,1 = ASE   1,000 TAF   1000, 1000	g 3 6

FAGE 1572

ARC11-0147A19 OTS

SEB-NOW MES-OFF SEB BASE

(REUKS4) ( D4 FEB 75 )

FARAMETRIC DATA

## REFERENCE DATA

#### SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT ELV-IB = 4.000 8.000 ELV-08 = LREF = 1290.3000 IN. TY . WI GOOD = 95MY = אכת פפפ. 1,199 RUDDER = ZHRF = 400.0000 IN. ZT BREF = 1299.3000 IN. GIMBAL = 1.000 SCALE =

SECTION ( 1) SEB BASE	DEPENDENT VARIABLE CF
ALFHA ( 1) = ~4.14 BETA ( 1) = .000	BASE 1.000 CM TAT
	621.0004399
	622.0004776
	623.0004370
	624.0004608
ALPHA ( 2) =315 BETA ( 1) = -4.003	BASE 1.000
	CN FAT
	621.9994969
	622.9994628
	623.0003947
	624.0004170
ALPHA (2) =327 BETA (2) = .006	BASE 1.000 TA≅ NO
	621.0004511
	622.9994977
	623,0004335
	624.9004631
ALPHA (2) =288 BETA (3) = 4.016	BASE 1.000
	CM TAT
	621.0005134
	622.0005224
	623.0004952
	524.0005217
ALPHA ( 3) = 3.915 BETA ( 1) =003	BASE 1.000
•	TAP NO
	621.0004541
	522,5004984
	623.9994445
	524.0004735

DATE DS HAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1573

ARC11-0141A19 OTS

SRB-NOW MES-OFF SRB BASE

(REUK55) ( 94 FEB 75 )

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT דץ און פפפפ. YMRP = LREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT BREF = 1290.3000 IN.

ELV-18 = 8.000

PARAMETRIC DATA

מפפ. RUDDER = GIMBAL = 1.000

4.999 ELV-OB = 1.250 MACH =

SCALE = .0200

## SECTION ( 1) SEB BASE

# DEPENDENT VARIABLE CP

ALPHA ( 1) = -3.983	BETA	(1) = .000	BASE CA PAT	1.000
			621.590	2969
			622.999	3092
			623.500	2797
			624.999	3911
ALPHA ( 2) =369	BETA	(1) = -4.000	BASE	1.000
			CM SAT	
			621.000	2614
			622.000	2872
			623.000	2431
			624.999	2689
ALPHA ( 2) =309	BETA	(2) = (2)	BASE TAP NO	1,000
			621.000	3011

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1.000 BASE ALPHA (2) = -.300 BETA (3) = 4.922 CH SAT

621,000 -.3770 622.000 -.3774 623.000 -.3669 624.000 -.3917

622.000 -.3259 623.000 -.2851 624.000 -.3092

ALPHA (3) = 3.966 BETA (1) = .003 BASE CH SAT

> 621.000 -.3305 522.000 -.3549 523.000 -.3027 624,000 -.3419

1,000

DATE	93	424	71

TABULATED STURCE PRESSURE DATA - TA19 ( ARC 11-014 )

PAGE 1574

#### REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT LREF = 1290.3000 IN. YMRF = .0000 IN. YT BREF = 1290.3000 IN. ZYRF = 400.0000 IN. ZT SCALE = .0200

E\_V-IB = RUDDER = GIMBAL =

8.000 ELV-08 = 4.999 = HOAM CCC. 1.499

1.999

PARAMETRIC DATA

SECTION (4) SEB BASE

DEPENDENT VARIABLE CP

BASE 1.000 ALPHA (1) = -4.07 BETA (1) = .000 CN TAT 621.000 -.1415 622.000 -.1930 623.000 -.1648 624.000 ~.1698 ALPHA (2) = -.294 BETA (1) = -4.000

BASE 1,000 TAP NO 621.000 -.1247

622,000 -.1575 623.000 -.1198 624.000 -.1375

ALPHA (2) = -.375 BETA (2) = .999BASE 1.000 TAF NO

> 521.000 -.1720 622.000 -.1984

623.000 -.1621 624.000 -.1785

ALPHA (2) = -.423 BETA (3) = 4.028BASE 1,000 CN SAT

621.000 -.2179 622.000 -.2210 623,000 -.2015 524.000 -.2224

ALPHA (3) = 3.834 BETA (1) = -.0039ASE 1.000

CM SAT 621.000 -.1742 522.000 -.1951 623,000 -.1553 524,000 -.1913

OF POOR OIL





DATE DS MAY 75

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

FAGE 1575

ARC11-014TA19 OTS+STRUT SRB-NO4+MFS-NO4+SRB BASE

(REUK57) ( 04 FEB 75 )

## REFERENCE DATA

## FARAMETRIC DATA

SREF LREF BREF SCALE	= 1290.3000 tu. = 1290.3000 tu.	מממ, = קאוץ	9 IN. XT 9 IN. YT 9 IN. ZT
SECTI	ION ( 1) SEB BASE	DÉI	ENDENT VARIABLE CP
ALPHA	( 1) = -4.49 DETA	eco, = (t)	000.1 ARE CM PAT 000.129
			922.0003135 623,0002836 624.0003065
ALPHA	( 2) =339 SETA	(1) = -3.99?	DOD.1 ESAE CK PAT
			521.0002781
			522.0002980
			<b>523.</b> 9992698
			524,0002954
ALPHA	( 2) =465 SETA	(2) = .019	SASE 1.000 TAP NO
			621,0003007
			622.0003306
			623.0002841
		•	624.0003113
ALPHA	( 2) =435 BETA	(3) = 4.031	BASE 1,000 CM PAT
			621,9903576
			622.0003558
	,		523,900 -,3459
			624.0003695
ALPHA	(-3) = 3.636 BETA	(1) = .003	BASE 1.000 TAF NO
			621.0003253
			622.0003528
			623.5002974
			624.0003396

ELV-D8 = 8.000 ELV-D8 = 4.000 RUDDER = .000 MACH = 1.250 GIMBAL = 1.000



•	٠,	, t	22	MAY	78
-	4		.12	444	, ,

TABULATED SOURCE PRESSURE DATA - TA19 ( ARC 11-014 )

622.000

623,000

524.000 -.2555

624.000 -.3217

FAGE 1576

4.999

REAR BEEN MCH-BEEN TUFFERTO PINITATE BASE

(REUK58) ( 04 FEB 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SQEF = 2690.0000 SQ.FT. LREF = 1290.3000 IN. BREF = 1290.3000 IN. GCALE = .0200	XMRF = 976.0000 IN. XT YMRF = .0000 IN. YT ZMRF = 400.0000 IN. ZT	E_V-V3 = 8.000 ELV-08 = 7.000 = 9.000
SECTION ( 1) SAB BASE	DEPENDENT VARIABLE CP	
ALTHA ( 1) = -4.155 BETA	000.1 BASE 1.000 CA PAT	
	621,995 -,2349	

-.2716

-.2468

ALPHA (2) = -.342 ESTA (1) = 4.028 BASE 1.000 TAF NO 621.000 -.3154 622.000 -.3149 623.000 -.2989

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DATE DS HAY 75

# TABULATED SOURCE PRESSURE DATA - TATE ( ARC 11-014 )

FAGE 1577

4.000 1.250

ARCII-DI4IAIS OTS+STRUT SRB-NJ4 MFS-OFF SRB BASE

(REUK59) ( 04 FEB 75 )

## REFERENCE DATA

# PARAMETRIC DATA

SREF = LREF = BREF = SCALE =	2690.0000 S 1 0005.0001 1 0005.0051 0020.	N.	XMRP = YMRP = ZMRP =	יטבת.	IN. XT IN. YT IN. ZT			ELV-1B RUDDER GIMBAL	= .0	000 MACH =
SECTION	( 1) SRB BAS	iξ		DEI	ENDENT VA	RIABLE CF				
ALPHA (	1) = -4,069	BETA (	(1) =	.012	BASE TAP NO	1,000				
					621,000	3195				
					622.000	3183				
					623.000	2911				
					624.000	3139				20
ALPHA (	2) =375	BETA (	i) =	.012	BASE TAP NO	1.999				ORIGINAL PAGE IS OF POOR QUALITY
					621.000	3004				Ø <b>2</b>
					622.000	3259				<del>20</del> j <u>≥</u>
					623.000	2852				ار ھ
					624.000	3116				$P_A$
ALPHA (	2) =333	BETA (	2) =	4.931	BASE TAP NO	1.000				E GE
					621.000	3716				$S_{1}$
					622.000	3783	•			
					623.900	3641				
					624.999	3829				

SCALE =

FAGE 1578

4,000

1.250

ARC11-0141A19 OTS+STRUT SRB-HI WES-NOW SRB BASE

(REUK60) ( 94 FEB 75 )

= EC-V\_G

MACH =

PARAMETRIC DATA

8,000

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 976.0000 IN. XT LREF = 1290.3000 IN. YMRF = .0000 IN. YT BREF = 1290.3000 IN. ZMRF = 400.0000 IN. ZT

GIMBAL = 1.000

ELV-18 =

SECTION ( 1) SRB BASE

.0201

DEPENDENT VARIABLE CO

ALPHA (1) = -4.12 BETA (1) = .012 BASE 1.000 TAP NO

621,000 -.1890 622,000 -.2090 623,000 -.1792 624,000 -.1989

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